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# Historic Structure Reports: A Redefinition

Billy G. Garrett

First, and foremost, a Historic Structure Report (HSR) should be a reference document that can be used in conjunction with other information to minimize the loss of significant material or character when making decisions that will affect a historic structure. The effort dedicated to preparation of a HSR should reflect the level of significance of the structure, the potential impact of a pending decision on the structure, and the availability of information about the structure. Flexibility should be encouraged in formatting HSRs to allow reuse of existing research and to maximize communication between CRM professionals and park managers.

In January, chief historical architect Michael Adlerstein and chief historian Ed Bearss convened a task force to assess the ways in which the National Park Service prepares Historic Structure Reports (HSRs) and to draft recommendations for improvement, for consideration of the NPS-28 task force. The HSR task force was asked to respond to three questions: When are HSRs needed? What information is essential for a HSR? What is the relationship between HSRs and HSARs?

Implicit in creating the task force was the assumption that either the current guideline (NPS-28, Release No. 3) does not adequately answer these questions or the guideline is misunderstood. The challenge for the task force was to examine this assumption and identify profitable changes that might be made in either the guideline or its application. Some modifications were clearly in order because of program developments since NPS-28 was last revised in 1985. For example, Historic Structure Assessment Reports (HSARs)were introduced to the Service in 1989 as part of the Inventory and Condition Assessment Program (ICAP).

Although rereading the guideline was an essential part of the work of the task force, a more critical aspect of their work was to judge how it is being applied. With this in mind, Adlerstein and Bearss brought together a small group of professionals who had first-hand experience in preparation and review of HSRs, and provided geographic diversity and different institutional contexts— from parks to regions to the service centers.

The following people served on the HSR task force:

Billy Garrett, chair (Southeast Region)

Ric Borjes (Golden Gate National Recreation Area)

Blaine Cliver (North Atlantic Region)

Rick Cronenberger (Rocky Mountain Region)

Dave Snow (Denver Service Center)

Stephanie Toothman (Pacific Northwest Region)

Randy Biallas, assistant chief historical architect (WASO), served as staff liaison to the task force. Ed Bearss; John Debo, superintendent of Cuyahoga Valley National Recreation Area; and Michael Adlerstein served as an advisory committee.

The task force did not approach its work as a theoretical exercise but as a practical one. This bias is evident in a number of basic topics which were addressed repeatedly by the group: What is the intent behind creation of a HSR? How are HSRs normally prepared and what new ways might be explored? Why has the existing guideline not been successful in limiting the scope of HSRs? From the answers to these questions the task force gradually developed a comprehensive impression of the interface between theory and practice in preparation and use of HSRs. Analysis of this information and resultant recommendations have been summarized in the form of a conceptual model.

The task force report and four commentaries comprise a special group of articles prepared for this issue of the *CRM Bulletin*. This author first explains the current HSR guidelines and then describes the conceptual model, along with a discussion of the task force recommendations. The following questions should be considered while reading these recommendations.

- Does the proposed model strike an appropriate balance between use of the HSR as a reference document for researchers and use as decision guide for managers?
- Servicewide, there are massive amounts of fragmented information already in existence about historic structures. Would the concept of a "reference file" help give order to that information on a structure-by-structure basis, or would it add to the confusion by creating another bureaucratic label?
- The Task Force proposes that individual HSRs be prepared for interim as well as ultimate treatments, and for building features as well as the entire structure. Would this be cost effective? Would it better protect historic structures?
- After appropriate changes have been made to the guideline, how should it be implemented? Would training and distribution of exemplary documents really change the ways in which managers make decisions and professionals use information?
- Should the level of effort for a given HSR be determined on the basis of professional judgment or prescriptions set out in the guideline? How can we set limits on research and "design" without loss of professional credibility or adverse effect on the resources?
- Should HSRs contain preliminary drawings or stop at the level of detailed schematics? Would this reduce the cost of HSRs? Would there be any "hidden costs"?

While the report addresses most of the conclusions of the task force, it does not contain all of the issues discussed by the group nor does it represent a consensus position. Neither does it outline specific changes which might be made in NPS-28. More than anything else, the report is an attempt to provide a comprehensive look at the way this key document functions in the preservation process. Individual parts of the model might be modified before it is "institutionalized," but it is hoped that this practical viewpoint will not be lost.

In this spirit, the four articles which follow the task force report address related issues. Randy Biallas provides a brief chronology of the development of the HSR by the National Park Service with specific attention to changes in the organization and content of the document. Michael Adlerstein updates the context of HSRs with a reminder that computers, databases, and systems theory are no longer something of the future but are basic to contemporary preservation work. Stephanie Toothman discusses the ways in which HSRs might help address our responsibilities for compliance with preservation law. And finally, Dave Snow deals in some detail with the levels of design that are appropriate to HSRs.

The fact that the task force did not reach complete agreement on all of the relevant questions is less of an indictment against the group than it is a reflection of the complexity and sensitivity of the issues that are involved. All of the participants on the task force agreed that one of the benefits of this assignment was a better understanding of how our

individual practices differed from one another and from the guideline. From these differences came a greater appreciation for the variety of circumstances in which HSRs are produced and countless ideas for improvements. The work by the task force is only a first step toward potential changes. We urge you to participate in this process by submitting your comments in the form of letters or articles to the editor of the *CRM Bulletin*.

Billy Garrett is the chief of the Historic Architecture Division, Southeast Region, NPS. He wrote the HSR task force report and coordinated the preparation and publication of the related articles included in this issue of the CRM *Bulletin*.

## Current Guidelines for HSRs

One of the basic planning documents used by the National Park Service in management of historic structures is the Historic Structure Report, usually referred to as the HSR. General direction for preparation and use of HSRs is contained in NPS-28, the servicewide guideline for cultural resource management. Release No. 3 of NPS-28 states that an HSR "... is prepared whenever there is to be a major intervention into historic structures or where activities are programmed that affect the qualities and characteristics that make the properties eligible for inclusion in the National Register (NPS-28, Chapter 2, Page 21)."

### Purpose, Content, Restrictions

The guideline not only states when an HSR is to be prepared, it also lays out what kind of information is to be included in the document and how that information is to be organized. According to the guideline, an HSR is to consist of three elements: an administrative data section, a physical history and analysis section, and an appendix. The content of each section is described in the Technical Supplement to NPS-28 (Chapter 5, Page 12). Because it is the prevailing reference for preparation of HSRs by NPS personnel, this portion of the guideline is worth reviewing in detail.

The administrative data section is devoted to two topics: institutional references and the relationship between the HSR and other planning documents. References include the name of the structure, its management category, and structure number, as well as identification of the planning document in which the ultimate preservation treatment of the structure was established. The section goes on to address such issues as storage of archival material collected during preparation of the report and justification for the proposed treatment or recommendations for changes in the proposed treatment. The bulk of the HSR is contained within the second section. As outlined in the current guideline, this section is required to address the following topics: 1. The significance of the structure and its setting. 2. The appearance, occupation, and use of the structure and its setting. 3. A description and record of existing conditions. 4. An evaluation of the impact of the proposed use on the integrity of the structure. 5. An engineering report on safety and load-bearing limits. 6. Identification and analysis of significant factors affecting preservation of the structure. 7. Recommended steps for preservation treatment, the basis for such recommendations, and preliminary design drawings. 8. The impact of the proposed action on the structure with recommendations to avoid or mitigate potential adverse effects. 9. Estimates of the cost to carry out recommendations. 10. Recommendations for further study. The appendix contains information about materials analysis, assessment of future research potential, an annotated bibliography, and information about historic furnishings uncovered during the study but unrelated to the treatment discussed in the report. Although a great deal of time would be needed to meet all of the requirements outlined in the Technical Supplement, common sense suggests that the level of effort devoted to an HSR should vary from one situation to another. In fact, NPS-28 states that research effort in cultural resource planning should reflect (a) the adequacy of existing information, (b) the need for additional information, (c) the nature and significance of the affected resources, and (d) the extent to which the resources may be affected by proposed plans or actions (NPS-28, Chapter 2, Page 11).

To aid in implementation of this concept, the guideline identifies three levels of historic investigation and three levels of structure investigation (Technical Supplement, Chapter 4, pages 6 & 8). In both systems the levels are characterized as: "exhaustive," "thorough," and "limited." Significance, condition, and level of treatment are given as the primary factors upon which a level of effort should be selected. For example, exhaustive structure investigation is to be used when the proposed treatment is restoration or reconstruction,

thorough non-destructive investigation is called for when the treatment is preservation, and limited non-destructive investigation is appropriate when "... dealing with a particular feature or aspect."

### Interpretation of the Guideline

As currently outlined, NPS-28 provides a broad, flexible framework for preparation of HSRs. This framework takes into account the planning system used by the Service, the financial constraints, and the sometimes disparate needs of managers and their cultural resource specialists. The clear intent of the guideline is for HSRs to be cost efficient, well defined, and professionally solid. HSRs are also intended to be "action" documents—spanning the gap between planning and implementation. Unfortunately, these intentions are flawed in two significant respects.

First, it is hard to limit an HSR using the provisions of NPS-28; they can be read to justify the content of almost any HSR. For example, one section of the guideline seems to call for an exhaustive approach to information gathering, whereas another allows variable levels of effort based on management needs. This basic contradiction is confused even further by language in one chapter which suggests that there should be a single HSR prepared to guide the ultimate treatment of the entire structure and language elsewhere which suggests that several HSRs should be prepared to guide a number of interim treatments on various portions of the structure. The one requirement about which there seems to be no question is that the report should be written as an integrated narrative by an interdisciplinary team.

In spite of these ambiguities NPS staff have produced many HSRs that are of high quality, acceptable to management, and within reasonable budgets. There have also been a number of HSRs which were extremely expensive, of questionable value to management, and of poor quality. Because of these problem cases, many managers seem to think of HSRs as large, costly documents that are essentially a bureaucratic impediment to their work plans.

Given a shortage of funds, limited staff time, and nagging doubts about the value of HSRs, there is a danger that some historic structures might receive treatment without sufficient research and analysis. This would be poor resource management and put the Service outside of good preservation practice, if not in violation of preservation law. Meanwhile, the workload for HSRs shows no indication of lessening. In fact, with the addition of new units, such as the Presidio, and the implementation of Servicewide construction initiatives, such as the current housing program, the demand for HSRs is likely to increase substantially over the next few years.

The second major problem with the guideline is that it places the HSR in a narrow slot between planning and construction. This is perfectly logical given the function of an HSR as a decision document. That is to say, one of the purposes of an HSR is to specify preservation work on a given resource. But that is not the only function of an HSR. It is also a documented reference about the evolution of a structure, its historical integrity, the nature of its materials, its character, and the potential effects of treatments on the structure.

Of course, documentation and recommendations for treatment are two sides of the same coin. The physical history and properties of a structure help explain the condition of a structure and restrict the range of actions that are appropriate for its preservation. This kind of information is useful at a number of points along the planning-construction continuum as decisions are made increasingly more specific about the use, treatment, and meaning of a structure in overall park development.

Of all special resource studies addressed in NPS-28, only HSRs contain information about the physical integrity and condition of a structure which might limit its development. Yet, according to the guideline, planning is to be based on Historic Resource Studies (HRSs) not HSRs. The potential for initial misdirection is significant and should be a

serious concern given the number of new units with historic structures that are being added to the system.

In summary, NPS-28 provides a good basis for developing HSRs but fails in two critical areas: (1) it does not contain adequate guidance for setting upper and lower limits on acceptable HSRs and (2) it does not allow for development and use of HSRs in all those situations in which the integrity of a structure should be a serious planning concern. These problematic issues are most apparent when dealing with resources at both ends of the significance spectrum. What is the "minimum" HSR for rehabilitation of a contributing structure in a locally significant historic district? When do we have enough information about a cultural World Heritage site? How can information about the integrity and condition of a structure be incorporated in the general planning process so that proposed uses are appropriate and compatible? These are the most important of the questions that must be answered if we are to improve the preparation and use of HSRs.

—BGG

### A New Conceptual Model

Preservation of significant qualities is at issue whenever a decision is made that could affect a historic structure. Determination of use, selection of paint colors, and approval of measures to provide handicapped accessibility are representative of this type of activity. Although these decisions can be viewed as simply selection of a course of action, in practice decisionmaking usually involves two other activities—initial consideration of information about the structure, and subsequent development of implementation documents.

### **Contextual Considerations**

Consider, as an example, the "management issue" of handicapped accessibility to a historic structure. The decision that the park superintendent must make is how best to accomplish this objective. Ideally, staff would analyze the problem in terms of both accessibility requirements and preservation concerns for the building in question. They would then generate alternative solutions to the problem, evaluate the alternatives, and make a recommendation to the superintendent. The superintendent might follow the suggestions of staff, pick another of the alternatives, or choose a course of action that was not identified by the staff. Once a solution had been approved, staff would refine and develop it to the point that it could be accomplished. Preparation of design development drawings, construction documents, cost estimates, funding requests, and compliance forms would all need to be done. The point is that although decisionmaking can be viewed narrowly as the selection of a handicapped lift \* can also be viewed as a broader activity extending from research to implementation.

The information associated with this broadened view of decision making (fact-finding, selection of action, implementation) closely parallels the content that is expected in HSRs (physical history, development alternatives, treatment). Yet it is important to note that management of a historic resource does not consist of a single decision—for example, to install a lift—but is an on-going process composed of many decisions—what use will go in the structure, will it be restored or adaptively used, etc. It should also be recognized that the types of information needed in different places of decisionmaking are notably different from one another, in large part because they are used by people in quite different roles.

Two basic conclusions can be reached after consideration of the context within which HSRs are used. First, it is apparent that these documents are part of a larger planning process. This process is hierarchical and dynamic, but it is also integrated in the sense that past decisions have implications for future action and that information generated as part of an earlier decision is available as background for subsequent consideration. Second, the information needs of individuals involved in resource management vary according to their respective positions and their concomitant authority. For example, managers usually need a succinct presentation of alternatives and their general implications, whereas an architectural conservator or preservation specialist may require exhaustive, detailed technical data.

The value of these contextual insights is that they provide for refinement of the HSR without erosion of its primary values. The great danger in setting limits on the content of historic structure reports is that decisions will be made on the basis of inadequate information and that information about current treatments will be lost to future investigators. Related problems are inherent in any attempt to define when an HSR is needed.

These concerns can be effectively nullified if proposed changes focus on specific information needs and recognize that HSRs are only one part of the overall information base available to managers. What is more, a focus on essential information is inherently economical because, by definition, it reduces excessive and redundant material.

In conclusion, changes in the guideline that would improve preparation and use of HSRs should be grounded in an appreciation of the document as a reference for and record of decisionmaking. Refinements should attend to the variety of information that is needed in the decisionmaking process and to the information base that is generated by the park planning process. Finally, and perhaps most important, no change should be considered which would diminish the ultimate purpose of an HSR—to maximize retention of historic character and minimize loss of historic fabric.

#### **Task Force Recommendations**

Given the preceding discussion, how might the National Park Service revise its approach to preparation and use of HSRs? The task force on HSRs has identified nine measures as follows:

Define an HSR as a reference document that contains any of three types of information about a historic structure: (a) physical history and condition, ~b) alternative ways of meeting management objectives, and (c) specifics of actual treatment.

This provision is a direct reflection of the expanded view of decisionmaking discussed above. There are, of course, close parallels with the content called for in the current guideline.

What is different is the concept that an HSR does not need to contain all three categories of information. This is not to say that a single HSR might not address the entire physical history of a structure, recommend alternatives for its ultimate use, and document that treatment. However, it would be equally valid for another HSR to focus on one period in the physical history of the structure, or to address just one major management issue.

Of course, there are a number of conditions which would apply to the more restricted HSRs. These conditions are discussed later in this article. However, as a matter of clarification, it may be helpful here to point out that limits of content should be based on the significance of the resource, pending management issues, and the availability of necessary information. For example, in the case of an HSR that is concerned only with a single management issue, it would have to be assumed that relevant information about the history and condition of the structure was readily available elsewhere. A brief synopsis of that data would be appropriate as background for the discussion of alternative program developments. The heart of the document would be the alternatives proposed as solutions for the issue and the evaluations of those alternatives. In effect, that particular HSR would function as a record of the planning process.

One implication of this recommendation is that the content of an HSR should be organized to reflect the use and nature of the information categories. This could be accomplished by dividing the report into three basic sections. The task force suggests that the first section should be a management summary. It would contain a concise summary of the findings, recommendations, or accomplishments elaborated upon in the body of the document. The second section of the report would focus on one or more of the three HSR information categories (physical history, program development, and program implementation). The primary emphasis of this section should be expressed in the sub-title of the report. The final section would be an appendix containing technical data and research notes. This is the place for administrative data, research notes, materials analysis, etc.

## Restrict the content of HSRs to information that bears directly on historic fabric and character.

Earlier guidelines have all discussed the respective roles of historical architects, historians, archeologists, and curators in preparation of an HSR. Since the interdisciplinary nature of cultural resource management seems to be well established at this time, no specific changes appear to be needed in this area. However, all potential contributors to an HSR should be guided by a proscription against research that does not contribute to an understanding of the condition and integrity of a historic structure. In particular, historical research should focus on the development and use of the structure and restrict broader scale

investigations to the minimum needed to establish or confirm the significance of the structure.

## Limit the scope of an HSR according to the availability of information in other convenient sources.

Every park and regional office has a body of existing information about historic structures. This information base might include old HSRs or parts of HSRs, research notes, measured drawings, photographs, condition assessments, National Register nominations, compliance documentation, specifications for preservation treatments, maintenance guides, and completion reports for construction projects. These information sources can be profitably thought of as a reference file. To maximize its use the reference file should be well organized and easily accessible. HSRs should not have to repeat any of the information contained in the reference file except for succinct excerpts or summaries.

Require that an HSR be prepared whenever ~a) existing information about the physical history and condition of the resource does not provide an adequate basis upon which to address anticipated management issues and (b) alternative courses of action for impending development could have a significant adverse effect on a historic structure.

As stated above, the requirement for an HSR depends on two factors: a need for specific, essential information and the availability of that information. Information needs are likely to be triggered by a number of management issues that could effect the character and fabric of a historic structure. These include: determination of general use, changes in use, how to provide handicapped accessibility, how to provide for life safety, how to deal with hazardous materials such as lead paint and asbestos, development or use of adjacent sites, whether any- missing historic features should be restored, how best to preserve the structure, how to provide adequate and appropriate mechanical and electrical systems, how to repair deteriorated elements, when to remove additions, and when to permit demolition.

Confronted with any one of these issues, management and staff should try to find the alternative course of action that best meets the respective program objectives while minimizing or avoiding adverse effects on historic structures. To most effectively and efficiently approach this problem, staff might prepare a case study which summarizes available information and assesses the likely effect of obvious alternatives. In effect, this case study provides a link between the technical information in the reference file and the decisionmaking process.

The form of the case study is not important. What matters is that it should state the nature of the management issue, summarize relevant information from the reference file, identify likely courses of action, provide a preliminary assessment of effect, and identify any deficiencies in the reference file which should be corrected. In effect, the case study is a briefing statement. If additional research or analysis is needed it could easily be converted into a task directive for an HSR; if not it could become the basis for compliance documentation.

# Require that an HSR be prepared whenever actions have been taken that directly effect the character or fabric of a structure.

As outlined above, recommendations 1 through 4 would encourage preparation of numerous, issue-oriented HSRs for each historic structure. Such an approach would build on the results of past research and continue the practice common during the 1950s and 1960s of writing narrowly focused reports. It would also complement the traditional concern for documentation of preservation treatments. This is at the heart of Article 16 of the Venice Charter (International Charter for the Conservation and Restoration of Monuments), which has provided general guidance for preservation activities around the world. Although the current guideline calls for documentation of treatments, the task force concluded that greater emphasis needs to be placed on this function. Without such information, future research will be hampered in two major respects. First, it will not be possible to adequately assess the long term effects of our preservation work; second, the distinction between historic fabric and replacement material may be blurred. HSRs that are

to serve in this capacity should contain as-built drawings, specifications, and photographs of work-in-progress. This information would go in the appendix.

Take design of development alternatives no further than schematics.

While a preliminary purpose of the HSR is to provide information needed for decisionmaking, another function is to document the process by which decisions are made. Al- though the process from issue identification to implementation is a continuous flow, a break needs to be made between HSRs and construction documents. Of late, this division has been made at preliminary design. The Task Force recommends that the division be moved back to schematics. This would underscore the function of the HSR as a reference document and help strengthen the importance of decisionmaking at the conceptual level.

As a matter of further clarification, information about proposed changes in the form and character of a structure and information about materials should both be included in HSRs. Information of the first type is normally presented in the form of schematic drawings and diagrams. Schematics should be produced in an economical, informal manner to maximize consideration of alternatives. They may show plans, elevations, sections, or details. On the other hand, material data should be presented in the form of photographs, analytical tables, and specifications.

Limit the research effort for an HSR according to (a) the specific development issues that can be anticipated for a given resource, and (b) the significance of the resource.

While there is no simple way to define an adequate level of effort for preparation of an HSR, this should not lead to the same research strategy for all historic structures. Every property listed in the National Register must be recognized for its historic qualities during the planning process, but this is not to say that a higher level of confidence is not appropriate for information about National Historic Landmarks or nationally significant structures. Properties specifically associated with the legislated purpose of a park might also deserve a more thorough investigation. Other variations in effort should be based upon the specific features of a structure that are likely to be effected by a proposed undertaking and the information which is already available to staff.

Although professional judgment should play a major part in establishing the level of effort for an HSR, some independent guidance might be helpful. With this in mind, the task force developed an information matrix which outlines the type of information which might be considered appropriate for a decision making given specific types of management issues and various levels of resource significance. One problem with the matrix is that it may come across as cumbersome and too rigid. Worse yet, use of the matrix could undercut the process of preparing case studies, looking into existing reference files, and thinking through actual information requirements. In spite of these shortcomings, the matrix is worth serious consideration because it clearly specifies limits for research on HSRs.

### Write for the primary audience; maximize use of information prepared by other reliable sources; minimize reformatting available information.

The primary consideration in setting stylistic requirements for an HSR should be the primary readers who are to use the information. These readers consist of two groups: managers and staff professionals. Managers are concerned principally with general issue resolution. The management summary and program development sub-sections should be written specifically for them. Staff professionals can be further subdivided into historical architects, architectural conservators, curators, historians, preservation specialists, landscape architects, and archeologists. People in these positions are typically concerned with the physical history of a structure, its treatment, and material components. Subsections and appendices addressing these topics should be tailored to meet their needs.

Given this general constraint, every effort should be make to format new information in such a way that it can be directly uploaded into existing databases. In recent years, the NPS has made a major effort to improve the ways in which cultural resource information is recorded and stored. The agency has also initiated a servicewide computerized system for

management of maintenance activities, including treatment of historic structures. As a result of these initiatives, a wide variety of information is available out of computerized databases. HSRs should draw from and complement those systems.

Finally, existing information should be used in its original form if at all possible. Reformatting is costly and should be discouraged in most HSRs. Where material does need to be reworked, traditional standards for graphic presentation and narrative style should be considered if it is not to be computerized. This is particularly important when the report is to be printed and distributed.

### Restrict the number of HSRs copied and broadly distributed.

Although printing and distribution of ĤSRs is not a major factor in most project budgets, the work required in editing and writing for publication does inflate schedules and increase costs. Remembering that the purpose of HSRs is to guide preservation, \* would make sense to limit the number of copies made unless the content of a particular report was either exemplary in form or the content was broadly applicable. Accordingly, in most instances, the number of copies of an HSR might be limited to 10. This would allow for a distribution of three copies to the park, two copies to the region, one copy to the state historic preservation officer, two copies to Washington, and two copies to the Denver Service Center. The distribution for a model report would depend upon its special qualities and range of analogous application. One special type of model HSR might be based on a synthesis of many years of preservation work. This would probably be appropriate only for major cultural resources. A more formal style of illustrated text should be employed in such a document.

### **Summary and Conclusion**

The problem with HSRs today is that they are commonly viewed as too costly, irrelevant, and of dubious quality. To this end the task force on HSRs has identified nine measures which should increase the timeliness and efficiency of report preparation. The group has emphasized that HSRs must function within a dynamic, decisionmaking context and has refocused the content and style of the document to better meet its intended use. The effect of these suggestions should be an increase in quality, an increase in the number of HSRs produced, and a decrease in average cost.

If these ideas meet with general approval, the next step in their realization should be revisions to NPS-28. This is essential, but taken alone it would not be effective. Underlying the redefinition of HSRs is a new operational assumption: each report is a unique document developed in response to specific management concerns, focused on the integrity and character of one particular historic structure, and limited by the availability of necessary information. Guidelines alone will not alter existing ways of doing business. Old habits will still serve as the basis for interpretation of the guideline and therein lies a potential roadblock to constructive change.

The real challenge inherent in the task force recommendations is that they are grounded not in reports, as such, but in the way information is used. Within this process-oriented context, cultural resource specialists would have to be highly flexible and responsive, while retaining their dedication to resource preservation. Expectations for managers would change too. In particular, they should consider frequent structured discussions with their professional staff, both before and after decisions are made about major management issues. To help advance these changes, training should be offered for historical architects, architectural conservators, historians, and managers who produce or use HSRs. In addition, a variety of new model HSRs should be circulated for reference.

Although the objective of this implementation strategy would be to facilitate use of the guideline, it should carry another more basic message. It is that without good information and clear thinking we risk making decisions that will adversely effect our cultural resources, but without a proper balance between thoughtful consideration and action the resources will suffer as well from lack of treatment. This message is central to the findings

and recommendation of the task force: HSRs are a means to an end, not an end in themselves.

—BGG

### **Evolution of Historic Structure Reports**

#### Randall J. Biallas

In 1935, following the Moore House restoration at Colonial National Historical Park, Charles E. Peterson prepared a report entitled *The Physical History of the Moore House, 1930-1934*. This report initiated the Historic Structure Report (HSR) concept and was the first completed in the National Park Service. To record documentary and physical research concerning the evolution of a structure, its condition before physical work, and finally the physical work itself established a NPS precedent. It underscored the importance of documenting such projects for future researchers.

Although many Historic Structure Reports were prepared in the decades following 1935, it was not until 1957 that the director of the NPS sent a memorandum to field offices the subject of which was Historic Building Report Form. This established a Servicewide organizational structure for preparing the HSR then called a "Historic Buildings Report."

Such administrative activity partly developed out of the tremendous growth of the Park System following World War II. Furthermore, historical architects were usually stationed in design offices, whereas historians and archeologists worked in parks and regional offices. To assure some professional standard of quality and administrative order throughout a diverse, decentralized organization, a Servicewide organizational structure and approval process became necessary.

As noted in Lee H. Nelson's retrospective introduction to Peterson's republished Moore House Report, many people are not aware of the Historic Structure Report's role in NPS preservation programs. The purpose of this article is not to present a detailed administrative history of HSRs, but simply to briefly trace their evolution and structural development.

The 1935 Moore House report was prepared after restoration had been completed. However, beginning in 1956, Field Order 11-56 required that a "Survey Report" outlining the history, condition, and proposed work on a historic structure be prepared and approved by park management before the physical work began. This resulted in the evolution of a rather complicated HSR approval process and organizational structure as outlined in the director's memorandum of February 12, 1957, the associate director's memorandum of October 24, 1958, the *Inventory with Classification and Work Code for Historic Buildings and Structures...* issued in November 1960, and the *Historic and Prehistoric Structures Handbook* issued in April 1963.

The director's 1957 memorandum was the first Servicewide management document outlining a multidisciplinary approach to the preparation of an HSR. The organizational structure outlined included an administrative data section, historical data section, architectural data section, archeological data section, landscape data section, and a furnishing and exhibits data section. The associate director's 1958 memorandum was the first document to use the term "Historic Structure Report."

The organizational structure of HSRs changed in 1971 with the issuance of the *Activities Standards*. Only an administrative section, historical data section, archeological data section, and a architectural data section were required. The physical work was to be recorded in a new report called a "Historic Structure Preservation Guide" which also contained information regarding the maintenance of the structure.

With the issuance of Release No. 1 of the *Cultural Resources Management Guideline* (NPS-28) in October 1980, the organizational structure of a Historic Structure Report was changed to include only three sections: an administrative data section, a physical history and analysis section, and an appendix. Release No.2 of this guideline in December 1981 and Release No. 3 in August, 1985 continued this practice.

The guideline, in contrast to the organizational structure of the 1971 *Activities Standards*, integrated the three professional discipline sections —historical data,

archeological data, and architectural data—into one physical history and analysis section. This change encouraged a multidisciplinary working relationship that would lead to integrated recommendations to park management.

From Charles Peterson's precedent setting report, the HSR concept has expanded to fill a crucial role in NPS management.

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# The HSR: A Static Report in a "Systems" World Michael Adlerstein

For many of the same reasons that the National Park Service Master Plan evolved into the General Management Planning process in the 1970s, the HSR is due for a reevaluation. The HSR should be one of management's most effective tools for decisionmaking for historic structures. It should answer management's most pressing concerns —what is significant about the structure and why is it significant, which fabric has integrity and what is the condition of that fabric, and how will a **specific** proposed use or intervention affect the structure.

Our present policies provide excellent guidance to professionals in the preparation of an HSR for a major intervention in the most significant historic structures of the System. But that only accounts for a small percent of the treatment activities that continually affect our inventory of historic structures. For projects of lesser impact or for less critical resources, HSRs often answer far more than required, take too long, and cost too much. A less exhaustive analysis would have done the job well, but guidance for that more precise, efficient product does not exist. New HSR guidance is needed that retains the integrity of the report, increases scope flexibility, and reduces costs. With this in mind, I asked Billy Garrett to chair the HSR task force, the results of which are reported in this issue of the *CRM Bulletin*.

As the realm of historic preservation continues to become more sophisticated, and the number of historic structures managed by the NPS continues to grow, the tools used by NPS historical architects and historians require this commensurate reevaluation. Even during the next few years, an enormous number of new HSRs will be required for broad initiatives like HUDAT, and for areas like the Presidio. These new HSRs must also be capable of relating to the new data systems driven products that are quickly becoming the bread and butter of historic preservation.

NPS Director James Ridenour has stressed his belief that the "wave of the future on decisionmaking is having information in a way that you can retrieve it quickly." Computerized databases are becoming more widespread and user friendly with each generation of software, and it is essential that all our products should be capable of benefiting (uploading) from past efforts, and sharing (downloading) with future computerized efforts. This is especially true of the boilerplate, fixed data for each structure such as names, numbers, location, historic and current use, critical dates, significance, and size.

The successful establishment of the Maintenance Management (MM) program in every park has provided a software standard to which cultural resource programs can and must relate. At present, the Park Historic Architecture Division (PHAD) manages several programs that are fully coordinated with the MM program. The most critical is the List of Classified Structures (LCS), a mandated inventory of all National Register eligible structures in the National Park System. The lack of a completed, updated LCS has been identified as a material weakness in the program of the PHAD. A completed LCS database would be capable of serving critical functions for the park, region and WASO, such as providing the parks with an inventory of their historic structures for park planning and programming, providing regions with a tracking mechanism for identifying serious regionwide deficiencies, and providing WASO with rolled up data on the overall condition of the historic structures of the System. A servicewide program for accomplishing this is now being planned.

Other coordinated programs that are critical to the management of the historic structures of the National Park System are the continued development and implementation of the Inventory and Condition Assessment Program (ICAP), the continuation of the program design of the Historic Structures Preservation Database (HSPD), and the

continuation of the inventory work on the Cultural Resources Management Bibliography (CRBIB).

ICAP is a component of the Maintenance Management program. It expands the present capability of MM by identifying individual features of specific structures. ICAP presently includes a major assessment component for buildings. An additional component for annual inspection and additional modules for roads and trails, grounds, ruins, fortifications and outdoor sculpture will soon be under development. The implementation of ICAP will assure that after special studies or interventions in structures, proper maintenance procedures are directly incorporated into the MM program.

The HSPD, still in development, is a database that will contain technical information about historic structure treatments and maintenance, thus providing the description of the work procedures for ICAP. As ICAP surveys are completed, HSPD work procedures will be identified for the required work tasks. The standard work procedures in the completed HSPD will reduce opportunities for accidental damage to historic fabric by untrained maintenance staffs.

The last of the coordinated software programs is the CRBIB, an on-going bibliographic program serving all the divisions of Cultural Resources. Over 11,000 reports entered in the CRBIB are retrievable by structure number, park or region.

In this systems approach to preservation, a person working on a planning document that includes various historic structures would be able to retrieve, through the LCS, the identification of all the potentially eligible National Register structures and their condition and status. Through MM and ICAP the team would obtain the maintenance history and the identification of the major problems of each structure with costs, and the specifications of the repair procedures through the HSPD for the identified problem areas. For any additional information, the bibliographic references of other related technical documents would be available through the CRBIB. The geographic coordinates listed on the LCS entry would allow the planner to graphically locate all the structures on a Geographic Information Systems map for the planning documents, and the aggregated cost in the LCS would give the manager an estimate of the treatment costs of the specified structures.

In this systems world, all this information for a specific structure would be consolidated in the HSR file.

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# Preservation Case Studies and HSRs Stephanie S. Toothman

Among the primary concerns of the HSR task force was to explore ways in which these reports could build on already available databases. The project documentation prepared in compliance with Section 106 of the National Historic Preservation Act and its implementing regulations 36 CFR 800 is one source of such data.

In an ideal world where preservation planning and treatment follow a logical sequence, unfettered by funding or staffing constraints, the preparation of an HSR would precede the compilation of any compliance documentation. As envisioned in NPS-28, we would thoroughly research the history and condition of a structure, carefully consider a full range of alternatives in consultation with the State Historic Preservation Officer and the Advisory Council on Historic Preservation, and then select a preferred alternative encompassing both stabilization and long-term preservation and maintenance strategies for the structure. In the real world, however, buildings are acquired that need emergency stabilization before the preservation planning process can be carried out, funding shortages lead to piecemeal planning and treatment, and "acts of God" require immediate responses to prevent the loss of severely damaged structures.

Preparing full-blown HSRs for each structure we encounter under any of these circumstances is out of the question. But, before we can respond to these situations, we must comply with 36 CFR 800 and our 1981 programmatic agreement with the Advisory Council and the National Conference of State Historic Preservation Officers.

The initial stage in the process requires a determination, in consultation with the SHPO, of whether a proposed action will affect resources eligible for the National Register. This can be achieved only if enough information on the history and integrity of a structure is available and the National Register criteria can be applied. If a project area includes eligible resources, than the criteria of effect must be applied. A comparison of the requirements for the documentation of effects (36 CFR 800.8) to the contents of HSRs, as outlined in NPS-28, reveals a number of common elements. Both require: 1. a description of the historic properties under consideration—their character-defining features and condition, as well as their significance; 2. a description of the proposed action and any alternatives considered, including available plans, specifications and cost estimates defining that action; and 3. an analysis of the impact of the proposed action. The information required for such reports is even more lengthy when there is disagreement among the consulting parties. The emphasis for all documentation is, however, on providing succinct statements responding to these requirements— "sufficient information to explain how the agency official reached the finding." A similar emphasis would well serve the preparation of HSRs. The information provided for the "Assessment of Actions Having an Effect on Cultural Resources," better known as the XXX form, required by the programmatic agreement is much less detailed. In order to respond to each of the items on the XXX form, a certain level of knowledge about a structure is needed. For example, basic information about the significance and condition of a structure is critical to being able to discuss the effects of an action. The body of XXX forms prepared for any structure over a period of time will provide a basic structure history for that time period. All of us involved in preparing compliance documentation know that a tremendous amount of time and effort is expended to meet these requirements, particularly in the absence of the prescribed planning and research documents. The question is, "What are we doing with all of the information assembled for these reports, particularly after the compliance process is completed?" For the most part, it appears that this information gets buried in compliance files.

It was the consensus of the task force that this information, acquired at significant cost, could be better used. We need to find a way to integrate this data into the process of preparing HSRs. At a minimum, we should develop on each structure a computerized data

bank that can accept and manipulate the data from multiple sources, including compliance actions, into the appropriate format—HSRs, HSARs, or whatever serves the specific need.

The task force agreed that the level of effort for documentation of historic structures should vary, reflecting (1) the adequacy of the existing information; (2) the need for additional information; (3) the nature and significance of the affected resource; and (4) the extent to which the resource will be affected by the proposed action. Following this line of thinking, there will be many cases where the data prepared for compliance actions will equal the appropriate level of documentation for a structure and the proposed treatment. For many locally and regionally significant structures, particularly those that are contributing elements of larger groups, this level of documentation will not only suffice, it is all we can reasonably expect to do for the structure.

The bottom line is that we are generating the data to support the preservation of many historic structures through the compliance process. Even if this data is gathered outside of or in lieu of the preferred planning process, we cannot afford to ignore any source of reliable documentation that will assist managers in making informed decisions about historic structures within a timely and cost-effective framework. Compliance documentation, whether in the form of "Assessment of Effect" forms, or full-fledged case reports, should be considered one of the key building blocks of that framework.

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### HSRs as Part of the Design Process

Dave Snow

Historic Structure Reports have been an integral part of the design process at the Denver Service Center (DSC) for many years. They have been used as one of the prime historic structure design documents for recommending treatments, making initial cost estimates for such treatments, and for complying with 36 CFR 800 by evaluating the effects of such recommended treatments. Unfortunately, this has led to development of very cumbersome and expensive documents for some projects. In many cases, it has also resulted in two phases of preliminary design. The first when the HSR is prepared, and a second when the project receives its funding. On the average there are about five years or more between these cycles and at least one change in park superintendent. Design requirements almost always change with the passing of time, people, political agendas, negating many earlier assumptions.

The opinion I expressed, as a member of the task force, was that this process could be modified in an operational sense, when preliminary design is initiated. The HSR would Still remain an initial, critical step. However, the process would become a more dynamic effort, allowed to accumulate additional research data as time passes. Preliminary design, on the other hand, would become more focused into a single preliminary design (06) phase, similar to that of a new building, Using previously assembled information in the HSR as continually updated background data. An entire (excess) phase of work could be removed from the current design process (see chart). The cost/ time savings would vary depending on the scope of the undertaking, but on a large project with an abundance of adaptive use design and recommended treatments, the savings could be substantial (50% or more). The change would not be in **what** is being done, but **when** it is being done. Referencing NPS-70, "Design Process Guideline," and the DSC "Operations Manual" (part 1) it clearly equates preliminary design with HSRS by stating: The results of the design analysis may be presented in a formal report, or the alternatives may simply be packaged together with all relevant support data for review and presentation purposes. For historic preservation projects, the preservation document is usually the draft or final HSR.1 The funding Sources for HSRS Is type 35 (Historic Structure Report) and for preliminary design, type 06. Most projects seem to acquire both types of funding over time, before they go into construction drawings (type 36), and then construction supervision (type 37). This would be perfectly acceptable if the HSRs stuck specifically to research and documentation, but as a rule they do not.

It would seem important (as is currently being practiced on Western Team projects) to always have a Conventional design analysis/preliminary design/review phase when treatment to a historic structure Is funded and imminent. This way, design treatments proposed for historic structures could be far more timely and in synch with more Conventional design projects. In This respect, it would require only a minor modification of NPS-70, to dovetail with proposed task force changes for HSRS in NPS-28.

1Design Process Guideline, Chapter 4, Page 5, October 1986.

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# Boxley Valley, Buffalo National River NPS Historic District in Private Hands

Jim Liles

Adapted from a presentation before the fifth triennial conference of the George Wright Society, Tucson, AZ, November 17, 1988.

When Buffalo National River came into the National Park System March 1, 1972, it included a settlement comprised of 24 bottomland farms, with more than 50 inhabitants—most descended from the early-19th-century pioneers who settled the seven-mile stretch of river once known as "Big Buffalo Valley" —now called Boxley Valley.

Think of Boxley Valley as a Cades Cove, transplanted from east Tennessee to north Arkansas, because the two valleys are quite similar in size, heritage and historical aspect. However, the human community of Cades Cove was displaced by land acquisition prior to the establishment of Great Smoky Mountains National Park in 1930. As with other units of the National Park System established earlier in the century, little or no recognition was given the value of cultural landscapes or their human creators.

Today the little valley of Abrams Creek in the Smokies is a "ghost settlement" and, however poignantly attractive to park visitors (as evidenced by the numbers hiking, motoring and bicycling the Cove's trails and roads) that remnant landscape conveys but a suggestion of the cultural vitality a visitor to the Cove would have experienced between 60 and 160 years ago.

Unlike the legislation establishing Great Smoky Mountains National Park, Buffalo National River's legislative history actually favored the retention of a living community and its lifeways. To help secure passage of a bill to establish the national river, former Director George B. Hartzog articulated the concept of setting aside a "private use zone," including Boxley Valley, where land could be left in private ownership and the Service acquire only scenic easements, for maintenance of the rural community and its pastoral landscape. This concept, in addition to being clearly enunciated in the park's legislative history, was iterated in its master plan: "A private use zone containing 9407 acres, including some farmlands, should continue in private ownership subject to scenic controls and necessary rights-of-way for roads and trails." In an earlier day, this would be labeled heresy: a unit of the National Park System (and a natural area, at that) authorized to embrace ecologically sustainable human activities, on perpetual private inholdings!

Following establishment, however, for various reasons, fully 75% of the lands within the private zone were acquired in fee by the NPS—destabilizing the Boxley community and leading to deteriorating relations. The NPS was about to lose the opportunity to keep the Ozark folkways alive in a seven-mile stretch of the Buffalo River, where the rural community of Boxley had flourished for the preceding 150 years.

By 1982, 10 years after the national river's establishment, former Superintendent Alec Gould had decided it was time to come to grips with the challenge of perpetuating the park's most impressive cultural landscape, while improving park-neighbor relations in Boxley Valley. Many of the homes and farms had been purchased by the Service, vacated, and neglected— some even removed—and the remaining population of the valley (some 40 individuals) was unsettled, even embittered, by a decade of land acquisition. Land status in the valley was a "crazy-quilt" of vacant NPS-owned farms and structures; occupied farms acquired by the Service and leased back for up to 25 years, under life estates and rights of "use and occupancy"; farms on which the NPS acquired only "scenic easements"; and others in which the service acquired no interest at all. Beginning in 1983, the NPS Southwest Regional Director agreed to support the park in the development of a formal plan to guide the Service toward improved management of the Valley.

With much input from Boxley citizens and cultural resources specialists from the Denver Service Center and the regional director's staff, there was completed and approved in 1985, a "Land Use Plan and Cultural Landscape Report, Boxley Valley." Out of this planning effort grew the realization that Boxley Valley was eligible for the National Register of Historic Places, as a distinctive cultural landscape. Boxley Valley contains over 200 structures contributing to its historical significance. Some of its houses and barns, a grist mill and a community building are considered fine examples of vernacular architecture; many date from the last century. In 1987, Boxley Valley was entered on the National Register as Big Buffalo Valley Historic District.

The two years of resources assessment, meetings and informal talks with the Boxley citizens confirmed park managers' early inclinations that those Boxley Valley bottomland farms and associated homes acquired by the Service should indeed be returned to private ownership. With approval of the Boxley land use plan, the stage was set for offering the former landowners—those who stayed on as life or term tenants—the opportunity to reacquire their former lands, except for the forested slopes and the river itself. The NPS would also retain easements for farm management, water quality protection, historic structures preservation and appropriate visitor access. (The valley contains several historic features of value for interpretation, as well as a beautiful natural area, known as Lost Valley, accessed by a very popular hiking trail from a trailhead campground.)

The intent of the plan is not to require the people in Boxley Valley to rearrange their lives to serve any broader public interest, but to preserve the opportunity for the continuation of a population that has developed distinctive ties to the land, as manifested in the valley's cultural landscape. Far from being a static landscape, the historic district is home to 14 families and 4 individuals, with the population expected to increase by 4 additional households, as the Service returns 4 vacant historic farms to private ownership in the near future.

Since the plan's approval, negotiations have proceeded with a dozen families interested in buying back their farms and homes. The first such conveyance was successfully completed in June 1987, and two more "land exchanges" were executed in January 1990. (An "exchange" occurs when the right of use and occupancy— a legal interest—is quitclaimed, in exchange for fee title, after a cash payment is made to the United States, equalizing values set by an appraisal.) Four more such exchanges are awaiting appraisals, as are four "sellbacks" of vacant, Park Service-owned farms, which are expected to be sold on the open market by 1991, subject to protective covenants (easements).

Not all the valley is to be returned to private ownership. Along a one-mile stretch at the valley's north end, there are no occupied farms; rather, there are open fields overlooked by uninhabitable historic structures of interpretive value, including two log houses pre-dating the Civil War. Near the valley's center stands the two-story grist mill built in 1870 and the log house and barn of the first miller. The lands associated with these significant resources will be kept in Park Service ownership, made accessible to the visitor, and maintained by historic leasing, pursuant to the National Historic Preservation Act, as amended in 1980. Three such leases comprising 100 acres were awarded February 1988, and three more comprising 96 acres were awarded in February 1990. This mechanism for land management is resulting in visible improvements in historic structure and landscape maintenance, because historic leasing's terms are an incentive for performance by the lessees.

An equally gratifying effort is being put forth by the Boxley community, on lands and historic structures in private ownership. Owners of lands under the new historic preservation and farm conservation easements have worked in partnership with park staff to not only rehabilitate historic structures, but to construct new barns, fences and other farm structures—and in one case, a fine new family home. (The Boxley Plan allows for construction of a limited number of additional houses, on selected sites and in accordance

with several restrictions in the easement, promoting construction that is in harmony with the traditional landscape features.)

With ownership of land comes more pride and effort in its caretaking. Whereas the population and level of care given its structures and farms had declined for 15 years, things are definitely looking up in this 5% of Buffalo National River called Boxley Valley, a striking community of farms and homes, occupied by hard-working, intelligent and outward-thinking individuals whose land ethic derives from their ancestry. Thanks to the on-going effort to keep alive the story of the river's people and their relationship to the land—an effort permitted by the national river's non-traditional legislative history—some of the river's pioneer tradition lives on.

Jim Liles is assistant superintendent, Buffalo National River. He guided implementation of the Boxley Plan, at the park level, over the past five years. Just as several people contributed to developing the "Boxley Plan,' several have undertaken extra effort to make the plan work.

On November 10, 1989, at an awards ceremony in Washington, D.C., Jim and Ric Alesch, park planner with the Denver Service Center, co-accepted on behalf of the National Park Service, a Presidential Design Excellence Award for the *Boxley Valley Land Use Plan and Cultural Landscape Report*. The first such report for any area in the National Park System, it described an innovative resource management concept for preserving the special, living cultural landscape of the Boxley Valley while protecting critical natural resources at Buffalo National River.

## Historic Mining Resources Conference

Robert L. Spude

The rise of gold prices in the 1970s and the reopening of old mines in the West, coupled with the Government's initiative to clean up abandoned mine lands, has created a compliance nightmare for anyone managing lands with mining-related historic resources. The requirements of the National Historic Preservation Act have been interpreted and reinterpreted without conclusive guidance. The decade of the '80s brought much activity—both in mining and preservation compliance—in formerly quiet, somnolent mining camps. In January 1989, a week-long conference on mining sites issues was held at Death Valley National Monument. The conference was open to the National Park Service, other Federal and state agencies, and the general public.

### **Background**

Mining site preservation dates back to shortly after the days of the '49ers, when pioneers built monuments to the "Grand Event." By 1900, pioneers were erecting monuments to James Marshall at Coloma, California, establishing historical societies in Arizona, and setting aside the founder's cabin at Skagway, Alaska, recent Klondike Gold Rush boom town. Similar commemorative events continued with statues built and cabins set aside—more often than not distant from their original site—to remember the pioneers, whose declining numbers hastened the process in the 1930s. Shops, too, were opened to sell mementos of those times to an increasing number of travelers more interested in the legends of desperadoes than the mines or milling relics. In 1924, with the beginning of the annual "Days of '76" celebration in Deadwood, South Dakota, the miners in the gulch and hills were ignored in favor of shoot-outs, the death of "Wild Bill" Hickok and the antics of legendary "Deadwood Dick." Mining site preservation and interpretation had not caught on.

Historic preservation on the mining frontier had come to be misrepresented by a bias toward the thrilling, the vigilantes or the urban amenities. Such places as Georgetown and Central City, Colorado, and the California Mother Lode towns along Highway 49 did preserve exceptional examples of architecture, but this architectural bias left the mining-related resources—the mine shaft houses, the stamp mills, and smelters—as derelict back drops. Any interpretation of the mining industry was omitted or given token display in museums, in "artifact gardens"—where machinery was drug in and displayed like so many *objects d'art*—or in a quick underground tour of a short adit. The desire to see the fantasy West led to the creation of theme parks—such as Ghost Town at Knott's Berry Farm, California; Old Tucson, Arizona; Buckskin Joe, Colorado; and a host of other buckaroo recreations—far removed from the original events and any of the mines.

A more scholarly approach to the study of western history, especially by the 1960s, led to a changed view on the western frontier and the resources considered worth preserving at each mining camp/site. Since the 1930s, the Federal Government had a system to inventory significant cultural resources. The Historic Sites Act (1935) authorized "a survey of historic sites, buildings, and objects for the purpose of determining which possess exceptional value as commemorating or illustrating the history of the United States." The National Survey of Historic Sites and Buildings resulted in the evaluation of hundreds of historic properties which fit into defined themes. The historic sites and buildings inventory looked at over 100 mining sites and selected 17 as potential National Historic Landmarks. The study was published as *Prospector*, *Cowhand and Sodbuster* (National Park Service 1967). Unfortunately, the NPS evaluation system reflected the popular view of looking only at the towns rather than mines or mills. Industrial sites were not included unless adjacent to the camp. Thus, significant mine structures or mills standing at the time were not recognized. The Historic Sites Act lacked a mechanism to preserve the resource. Although the intent behind surveying properties was to consider

each site for possible inclusion in the National Park System, the survey resulted in few properties being established as parks, and none related to mining until the 1976 establishment of Klondike Gold Rush National Historical Park at Skagway, Alaska, a boom-town on the trail to the gold fields. Thus, a need was identified to help other significant properties. In 1960, the National Historic Landmarks program was established to list the nationally significant sites, which received additional protection with the National Historic Preservation Act of 1966. Since then the NPS has set priorities for NHLs to receive documentation, technical assistance, and evaluation through condition assessments. Grants were provided when funds were available. A few commercial properties received tax credits. In 1976 a separate monitoring process was established to protect NHLs from mining impacts. In addition, NHLs are to receive close monitoring, and information about potential threats are to be reported to Congress, as required by Section 8 of the General Authorities Act, October 7, 1976. The majority of mining sites received some protection through the National Historic Preservation Act and the Section 106 process.

During this period, private and state initiative provided additional protection. At Virginia City, Montana, the Bovey family acquired half the near-ghost town and preserved buildings otherwise bound for demolition; similarly, the Cain family patched and braced the buildings of Bodie, California, until the state could acquire the property. California had completed several important preservation projects throughout the Mother Lode, most outstandingly at Coloma, Columbia, Sutter's Fort, and Grass Valley in the 1940s-1950s, during the centennial of the gold rush. Nearly every other far western state followed suit with at least one state park dedicated to the mining theme—at Tombstone and Jerome, Arizona; at Bannock, Montana; and at South Pass City, Wyoming. Again, the focus of these parks was the towns, not the mines. Finally, in the 1970s a few parks were created which showcased industry in the west—the hydraulic mining at North Bloomfield, California; the silver mill at Berlin, Nevada; and the railroad and mines at Georgetown, Colorado. The NPS, too, began preserving the industrial west, preserving sites within its large natural parks which represented mining history —Harmony Borax works and the Keane Wonder tramway at Death Valley National Monument; the Terlingua quicksilver mines at Big Bend National Park; and the Coal Creek dredge, Yukon-Charley Rivers National Preserve.

Outside the parks the story was different. In 1974, Congress lifted the ban on private ownership of gold; market prices jumped from the regulated \$32 per ounce to over \$600, then settled down to the \$300 to \$400 range during the 1980s, making formerly abandoned gold mines profitable. At Virginia City, Nevada, Cripple Creek, Colorado, and other areas new mines were initiated using new technologies of open cut and heap leaching. This technology has created massive, large scale threats to the historic scene. In 1977, Congress passed the Surface Mining Control and Reclamation Act which provided grants through the Office of Surface Mining (OSM) to states to close dangerous mine openings and remove life-threatening hazards. Western states established abandoned mine land programs and initiated cleanups, often within historic mining districts. The Environmental Protection Agency also received new mandates, especially the Comprehensive Environmental Responsibility, Compensation and Liability Act of 1980, as amended, which will greatly impact such landmarks as Butte, Montana and Leadville, Colorado, and a host of lesser sites. These Acts created a mechanism for destruction of historic mining resources before Federal agencies could react to and put in place systems to evaluate and protect or mitigate the loss of significant resources.

The legislation also created a lot of work in the cultural resource management field. It forced preservationists interested in mining heritage to shift their attention from the architecture of the mining camp to the mines themselves, many of which had reverted to public ownership. Also, the new extensive mining operations, with their large open cuts and pits, created massive tailings which ended up on public land. Thus, compliance with Federal preservation laws came into play. Federal agencies and their contractors began to

ask questions about how best to inventory and document mines, how to mitigate impacts, and how to interpret or display objects or sites.

The South Dakota State Historic Preservation Office was the first to try to grapple with the problem in a holistic approach. In 1982, the Homestake Mining Company had reopened the Open Cut at Lead, an act that would raze part of the National Register towns of Lead and Terraville. The South Dakota SHPO worked with the U.S. Forest Service, the Homestake Company, and other agencies to comply with historic preservation law. They also hosted a workshop in 1987, the results of which were published as the "Proceedings of the Workshop on Historic Mining Resources, Defining the Research Questions for Evaluation and Preservation" (available from the State Historical Preservation Center, Box 417, Vermillion, South Dakota 57069). It brought up questions about defining terms, inventory, historical archeology, and documentation.

While new mine operations, EPA cleanups, and OSM initiatives continue, additional threats loom. The Forest Service must deal with increased visitor use on its lands. For example, the ski industry of Colorado has changed the ambiance of Aspen, Crested Butte, Breckenridge, Telluride, and other former mining camps. Similarly, off road vehicle use on Bureau of Land Management desert lands has increased in number and destructiveness.

The weight of these threats prompted the NPS to coordinate the workshop on historic mining resources at Death Valley National Monument. A group of concerned individuals and agency representatives met to share information about the preservation of historic mining sites. They discussed many areas of mutual concern, of how to survey and evaluate sites, how to inventory and document, how to restore and rehabilitate sites and how to interpret and manage those significant remnants of America's mining past.

### **Papers Presented**

Because of new mining activities in historic mining areas, contractors and agencies are concerned about how best to survey and nominate properties to the National Register of Historic Places as well as how best to mitigate any adverse actions on significant resources. Other participants were concerned with managing historic mining sites—old mills or sites of camps, mine adits or waste piles—on public lands. Representatives from private, state, and Federal parks and museums were interested in the interpretation and display of mining materials. The conference papers have been compiled and published: Leo Barker and Ann Huston, *Proceedings of the Historic Mining Conference, January 1989, Death Valley National Monument, California* (San Francisco: NPS, 1990). Copies are available from the editors at National Register Programs, Western Region, National Park Service, 450 Golden Gate Avenue, P.O. Box 36063, San Francisco, CA 94102.

The proceedings are divided into eight parts. Duane Smith, longtime resident of the mining regions of Southwestern Colorado and history professor at Fort Lewis College, Durango, presents a brief overview of the impact of mining on the West. He sets the stage for understanding the widespread appearance of mining, and the consequent abundance of sites, in varying states of repair and ruin, across the landscape. Leo Barker prepared a bibliography for further reading, which is appended to the proceedings.

Section 2 addresses a critical question about which mining resources are significant and which are not. Land managers and cultural resource professionals are challenged by the abundance of remains and must make decisions about how best to identify and evaluate them. The papers outline the preservation planning process, methods of inventory, and the National Register guidelines. Special topics include cultural landscapes, engineering works, and underground resources.

Section 3 describes the methods and state of mining site historical archeology. Because mining sites were often ephemeral and easily removable, frequently all that remains is the debris and ruins of former activity.

In Section 4, the Historic American Engineering Record (HAER) is described. HAER recordation is often used as part of mitigating the adverse effect of removing a historic structure. Section 106 of the National Historic Preservation Act requires Federal agencies to take into consideration their actions on historic properties, and thus may require mitigation actions. In Section 5, the 106 process and example mining site mitigations are described, such as videos and films, artifact salvage, publications, placing markers, and stabilizing historic structures.

Section 6 includes papers on how Federal land managers must make resource management decisions with advice from interested parties, the SHPO and the Advisory Council on Historic Preservation. They must decide how best to protect and interpret historic mining properties, to provide for multiple demands from visitors, mining companies, and other pressure groups.

Examples of successful preservation are discussed in Section 7. The papers range from one about the first steps in researching a potential heritage tourism site to two papers about the management of parks established to commemorate mining events. Often historic mining sites are located within parks set aside for their natural resources. Park managers must take into consideration cultural resources in their parks and occasionally take action to preserve and interpret them. Three of the papers discuss options for such management on state and Federal lands.

In Section 8, the final paper discusses the Western Mining Museum, in Colorado Springs, Colorado. It is a unique mining museum which displays operating machinery, including a complete ten stamp mill, steam drills, and a Corliss engine.

### Agenda for the 1990s

During the conference several resolutions were passed in support of further work. First, we must continue to look at mining sites, not just the legends and architecture of the mining frontier.

Federal agencies must continue responsible management, and those out of line need to be made accountable. There should be no more over-zealous cleanups.

Mining interests can continue while still being responsive to public concerns and Federal requirements. Massive mining operations can quickly erase the historical remnants of a century before, and preservation should be encouraged.

Resolutions were passed in support of a National Mining Initiative to identify and protect mining resources. This action would include Congressional directives to agencies responsible for management of mining sites; the completion of National Register guidelines for mining sites; the continuation of Advisory Council and SHPO guidance to agencies on appropriate mitigation or avoidance; and the establishment of HAER guidelines for mining sites.

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## Looking for the Mother Lode: Hard Lessons Learned by the NPS

Ronald W. Johnson John C. Paige

On a snowy Rocky Mountain night in early February 1989, 300 people braved the mountain winter weather to reach a small high school gymnasium. They went to confront representatives from their congressional delegation, town, and the National Park Service on the future of their community.

In late 1988, the NPS began preparing a new area study for the National Historic Landmark (NHL) district located in Georgetown and Silver Plume, Colorado. Two years earlier, local politicians and preservationists had mounted an effective lobbying campaign with the U.S. Congress to fund a study of alternatives to be prepared by the NPS. Although the historic preservation agenda motivated the initial groundswell for the NPS involvement, the moribund local economy later be- came the primary reason for the study. The NPS planning office in Denver prepared the study in a timely and professional manner, but the study led to turmoil and a bitter struggle for the communities' future. Now the battle echoes from the small mountain cabins to the halls of Congress. This article will describe how this happened as well as what lessons the NPS learned about politically- and economically-driven new area proposals.

### A Study of Two Hard Rock Communities Having Hard Times

The Georgetown-Silver Plume Historic District is about 50 miles west of Denver on I-70 located in a scenic high mountain valley. Gold was discovered in 1859 near present-day Georgetown, and in 1864 miners discovered silver. Later, a settlement to the west named Silver Plume began to develop.

In 1868 Georgetown contained 1,500 residents (eventually growing to 5,000 persons) with hotels and businesses, and numerous active mines. One of the country's first narrow-gauge railroads—the Colorado Central—which originated in Golden, Colorado, reached Georgetown in 1877. Also during this time, tourists discovered an area considered to be a picturesque and typical Rocky Mountain mining town.

In 1893 silver panic brought the vibrant economies of Georgetown and Silver Plume to a stop, and the areas began to decline in population. These communities remained economically stagnant throughout most of the first half of the 20th century. After World War II, tourists came in increasing numbers; and a few people bought vacation homes. Today, the valley contains a combined population of more than 1,000, an integral part of whose economy relies on tourism. However, most Colorado visitors drive past these 19th century mining communities on I-70 to the 20th century mountain resorts of Keystone, Cooper Mountain, and Vail.

The Secretary of the Interior designated the Georgetown-Silver Plume Historic District as a NHL on November 13, 1966. The historic district, nearly 5 miles long, stretches from Georgetown Lake to about 3/4-mile west of Silver Plume. The tangible remains of the mining frontier include various houses built for mine managers or workers, merchants' houses, commercial buildings, schools, hotels, county and city offices, jails, churches, firehouses, ore processing mills, mines, and a railroad.

In 1979, the NPS began the first phase of a reconnaissance survey of Georgetown and Silver Plume. The Georgetown-Silver Plume survey (November 1980) reaffirmed their national significance, but contained no recommendations. The study identified three options for further investigation including a study of alternatives to develop future management, preservation, and interpretive strategies.

For the last two decades, the local communities as well as the state of Colorado have been committed to preserving this significant resource. Since 1980, the state, local governments, philanthropic foundations, and private individuals have invested nearly \$6 million in the communities to preserve and enhance their rich heritage. Behind the impetus for additional external assistance was the growing recognition that the grassroots support and existing sources of funding may soon be depleted in the development and promotion of Georgetown-Silver Plume as a cultural resource attraction. Local citizens and elected officials have been concerned about being able to preserve cultural resources when the financial reserves of the towns, county, and state have been seemingly exhausted.

Once the NPS completed the reconnaissance survey nothing happened until the 1987 Colorado General Assembly passed House Joint Resolution No. 1032 to support further study. Then in September 1988, Congress directed the NPS to prepare a study of alternatives.

On October 20, 1988, staff from the NPS Denver Service Center (DSC) and the Rocky Mountain Region attended a meeting called by Clear Creek County officials and representatives from Georgetown and Silver Plume. The leaders announced they intended to establish —in conjunction with the congressional offices of Senators Timothy Wirth (D) and William Armstrong (R), and Representative David Skaggs (D)—an America's Mining Frontier Task Force. The task force provided some background information to the NPS planning team, but its activities caused significant problems as the study unfolded.

Between November 1988 and February 1989, the NPS planning team traveled to Georgetown and Silver Plume to collect data and conduct public meetings. During the meetings, some individuals pleaded for NPS assistance in preserving the decaying 19th century structures and in attracting vitally needed tourist dollars. Others expressed fear that the NPS would stop or control mining (which is virtually nonexistent in the historic district), condemn their homes, and encourage "strangers" to visit their community. As the study progressed, Armstrong, Wirth and Skaggs requested that members of the study team attend a special public meeting in Georgetown on February 1, 1989. The meeting occurred a day after a National Inholders Association representative spoke at the request of the newly-formed Friends of an Independent Georgetown.

The study advanced rapidly during the winter and spring of 1989. In June, the NPS issued a press release summarizing the alternatives contained in the draft study. In addition, *The Clear Creek Courant* newspaper reprinted the entire summary document and distributed 4,000 copies.

The six alternatives presented to the public offered a broad range of strategies for the management, preservation, interpretation, and use of the study area's significant cultural, natural, scenic, and recreational resources.

**Alternative 1** emphasized maximum local control over the future of the two communities. **Alternative** 2 proposed streamlining preservation groups in order to better protect resources and increase visitation without NPS involvement. **Alternative** 3 recommended new economic development and diversity to encourage the preservation of cultural resources, again without NPS presence.

In **Alternative** 4, management would continue at the local level, but a foundation or commission would be created to consolidate and prioritize preservation needs and proposals for development; and the Federal Government would provide one-time funding for the most urgent preservation needs.

Alternative 5 suggested that development of the two communities from 1859 to the present be emphasized and interpreted. This alternative advocated the designation of the Georgetown-Silver Plume National Historical Park. The physical presence would consist of a leased or purchased site from a willing seller or donated to the NPS for administrative headquarters/visitor center and preservation/maintenance buildings. The majority of park activities would be conducted by cooperative agreements with state, county, and local governments, private organizations, and individuals, and other Federal agencies.

**Alternative** 6 proposed selecting a core area within each community for restoration and/or reconstruction as a museum entity by either NPS or the private sector with heavy emphasis on interpretation through living history. The core areas would be physically defined to interpret the expanse and extent of the types of businesses and services found during the mining heyday between 1859 and 1893. The last two alternatives would require a major commitment of Federal dollars.

To present these alternatives to the public, the planning team held open meetings in July, where the NPS explained the alternatives and distributed copies of the summary document to the public. The Georgetown participants favored either alternative 1, 2 or 3, all of which constituted no NPS involvement with the community; the Silver Plume participants favored alternative 4 with some support for alternatives 5 and 6. During the public comment period the NPS received 41 responses. The general comments received from individual citizens indicate a majority of those responding preferred no NPS involvement.

The strong opposition to NPS involvement seemed to stem from fear that property owners may lose control, homes and/or businesses would be condemned, property values would decline, and revenues lost. Concerns were expressed about the towns' ability to handle increased tourism, a lack of parking areas, and the difficulty in walking between the two communities (which is virtually impossible to do at the present). Crime, pollution, dislike of tourists, and the strain placed on local services were other reasons cited against NPS involvement.

Comments reflected town pride and western self-sufficiency. A few individuals suggested that local preservation efforts are excellent, and believe that these communities will continue to raise necessary preservation funds. While several citizens praised the autonomy of the towns in having thus far independently preserved their heritage, they felt it was inevitable that external assistance would be necessary. This debate eventually raged in both local and metropolitan newspapers.

Several respondents discussed the future of mining claims. Mine owners feared the NPS would halt mining throughout the county or, at least, place mining under intolerable regulations. They argued that the future for the two communities lay in mining, not tourism.

The two communities voted on November 21, 1989 to determine public opinion on NPS participation. The people in Georgetown voted 352 to 257 in favor of limited or full NPS activity. Silver Plume voted 57 to 40 in favor of limited or full NPS involvement. The elected officials of Georgetown took the election as a mandate to lobby Congress for additional NPS assistance in the mining communities. These efforts continue to the present.

### What Actually Happened

Supporters of additional NPS involvement in the Georgetown-Silver Plume communities convinced the Colorado congressional delegation to mandate a study of alternatives without first investigating potential public support or opposition. The creation of a local task force to provide information for the planning team acted as a catalyst for opponents who effectively confused the roles of the group and NPS study team. The local task force went far beyond its mandate with such activities as attempting to design a visitor center for the community, a step not even suggested in the study of alternatives. In addition, due to these diffuse efforts, those who may have supported the NPS study became worn out and despondent due to the incessant carping and misinformation transmitted by opponents.

When these opponents rose in force at public meetings, the advocates remained relatively silent. When the need came to support the study of alternatives, few stood to be counted. Also the disclosure of a draft bill purporting to call for the establishment of a Georgetown-Silver National Historical Park caused irreparable damage and loss of credibility to the study process.

The Friends of an Independent Georgetown opposed any local NPS presence. From the outset FIG attempted to delay or even stop the study. As the study advanced, there were two predominant issues—fear of condemnation of private property by the NPS and fear of further Federal controls over the declining mining industry. Although the NPS explained its current policy at meetings, published information on NPS guidelines, and met with concerned citizens and groups, the planning team never effectively silenced those critics who exploited the two issues. In addition, the negative attitude toward a possible role for the NPS in Georgetown reflected the traditional western view of rugged individualism versus Government regulations spawned in Washington, DC, and the concern that the growing tourism industry in mountain communities will place pressure on limited community resources in such places as Georgetown and Silver Plume.

#### The Broader Issue

Despite the site-specific alternatives contained in the 1989 study, there is a question whether Georgetown-Silver Plume Historic District is the best place to interpret the western mining frontier. In Colorado alone there are a half dozen other NHLs that illustrate this theme. Although the resource is a National Historic Landmark—and, by definition, of national significance—a divided public at Georgetown illustrates the limitations of Federal protection. Also, a broader study is needed to determine the best place or places to present the gold and silver mining frontier story. There are many other candidate areas throughout the western US which require scarce Federal dollars and expertise to preserve equally significant resources which have more supportive publics.

This study illustrates the need to advance beyond the traditional criteria of national significance and threats to resources in the establishment of a new National Park Service unit. Public interest and sentiment toward creation of an NPS unit in small communities must be gauged accurately before the NPS is requested to undertake such a study. This is an appropriate role for Congress to assume. In the case of Georgetown and Silver Plume, the NPS' public involvement process proved critical in determining the lack of local support for future Federal action. After all, Congress must direct scarce Federal funding to those communities with nationally significant resources which support the mission of the NPS.

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## Reconfiguring the Cultural Mission: Tribal Historic Preservation Programs

Dean B. Suagee Karen J. Funk

The American people love to celebrate history, but those parts of American history that feature American Indian and Alaska Native peoples are problematic.1 Many of these chapters are so shameful that ignoring them has been an accepted practice. But there is much in the histories of American Indian and Alaska Native peoples and their dealings with the dominant American society that is glorious, and much of what is shameful is nevertheless instructive.

We believe that an essential part of the solution to the problem of Indian and Alaska Native peoples in American history must be for Indian and Alaska Native peoples to preserve their own histories and to present their histories to the dominant society from their own perspectives. Accordingly, we have borrowed our title of this article from the recent conference "Cultural Conservation: Reconfiguring the Cultural Mission" sponsored by the American Folklife Center of the Library of Congress. This notion conveys our sense of the ways in which our Federal historic preservation program must change if it is to meaningfully accommodate Indian and Alaska Native interests in historic preservation and cultural conservation.

The National Park Service (NPS) has a pivotal role in the effort to bring tribes into full partnership in our historic preservation program. That role is twofold: 1) through its "external" program NPS is the administrator of the National Historic Preservation grants to tribes and will have a critical say in the development of the tribal programs; and 2) through its "internal" program the NPS administers and designs resource management and interpretive programs for millions of acres of public lands which include a great many areas that are important to Indian and Alaska Native peoples for historic and cultural reasons. The NPS internal policies also affect other Federal land managing agencies practices, since the NPS is considered the "lead agency" in the field of cultural resources management. NPS responsibilities include the sensitive areas of archaeological excavations and policies concerning matters such as disposition of human remains and archaeological resources. These are matters in which the religious beliefs of Indian and Alaska Native peoples have often been neglected.

There are many ways in which the NPS could help to address the "problem" of Indian and Alaska Native peoples in American history. The scope of this article, however, is limited to tribal participation under the National Historic Preservation Act.

### **Background**

The 1980 amendments to the National Historic Preservation Act of 1966 (NHPA) enacted two important provisions relating to Indian tribes. First, Section 2 of the NHPA, the declaration of policy, now lists Indian tribes among the entities which are to be included in a partnership for carrying out the Federal historic preservation program. Second, the NHPA now authorizes the Secretary of the Interior to make grants to Indian tribes "for the preservation of their cultural heritage." The fiscal year 1990 budget for the Department of the Interior includes \$500,000 for grants to tribes from the Historic Preservation Fund, the same source of funds from which grants are made on a recurrent basis to help fund the operations of the State Historic Preservation Offices (SHPOs). This marked the first time that funds have actually been appropriated for tribal historic preservation purposes. The NPS solicited applications from tribes for these grants, and recently announced that 15 of the 270 proposals have been selected for funding.

We are encouraged that Congress has finally started the process of bringing Indian tribes into the partnership for carrying out our national historic preservation program.

However, the initial appropriation of \$500,000 must be regarded as only a beginning. Through the more than two decades in which the states have received historic preservation grants, the funding needs of Indian tribes for historic preservation have been almost entirely neglected. If Indian tribes are to become real partners in this program, as we believe they must, the level of appropriations for grants to tribes must be substantially increased and must be provided on a recurrent basis.

The message of tribes seems to be having an impact with regard to historic preservation. The Secretary of Interior's 20th Anniversary Report on the National Historic Preservation Act says that tribes should be given the option of operating their own programs under the Act.4 The National Conference of State Historic Preservation Officers testified in each of the past two years in favor of funding for tribal governments under the NHPA, and that organization has also included tribes in their legislative efforts to revise the National Historic Preservation Act. We also are encouraged by the fact that the Administration's proposed FY91 budget requests \$750,000 in funding for tribal historic preservation programs. While this amount of funding would barely begin to meet the needs, the fact that the Administration requested even a modest increase over the FY90 appropriated level is a political gain. The FY90 Interior Appropriations Act also requires the NPS to report to Congress on tribal historic preservation needs, and further requires that the NPS consult directly with tribes in developing the report. We commend the NPS for its efforts in working with tribes to carry out this mandate and for the quality of the report entitled "Keepers of the Treasures."

### **Important Role for Tribes**

Indian tribes are different from other ethnic groups in the United States in two fundamental ways. First, in contrast with all other ethnic groups in the present day United States, whose cultural roots reach back to other lands, the cultural traditions of Indian tribes have their roots here in North America. The traditional material cultures of Indian tribes were quite literally part of the natural environments in which they lived. This can readily be seen from the ways in which Indian people provided for their sustenance, the tools, and clothing and shelters that they made, and the ways in which they ornamented their material possessions. The nonmaterial aspects of tribal cultures—religious belief systems and ceremonial practices, oral history and folklore, languages—are also closely tied to the natural world.

As we enter the last decade of the 20th century, the society at large should bear some responsibility for helping to preserve these indigenous cultural traditions. Such responsibility is appropriate because the cultural disintegration that exists today in many Indian communities is largely a result of the westward expansion of the United States and the Federal policies that followed expansion, policies which were intended to force (or, in the benign era of the Indian Reorganization Act of 1934, not to force but rather to encourage) Indian people to become assimilated into the dominant American society. The assimilationist thrust of Federal policy was finally abandoned in the 1970s, when the current policy of "self-determination" came into favor in both the Executive Branch and the Congress, but Indian people must still cope with the legacy of generations of assimilationist laws and policies.

Looking to the future as well as to the past, the larger society should want to help the tribes preserve their cultural heritage because, in the context of the environmental crises the world faces today, the larger society may be able to learn something of practical value from these tribal cultures which have evolved in a close relationship with the natural world. Ultimately however, citizens of the dominant society and their elected officials must remember that tribal cultures are living cultures that cannot be preserved except in the context of the communities that carry them on. The larger society can and should help, but the responsibility for the preservation of tribal cultural traditions must be borne by the tribes themselves.

The other fundamental way in which Indian tribes are different from other ethnic groups in the United States is that Indian tribes are units of government whose sovereignty predates that of the United States. The governmental authority of Indian tribes has been limited by treaties, by acts of Congress, and, in certain limited instances, by necessary implication from their dependent status. Except for such specific limitations, Indian tribes possess the full range of governmental authority that is inherent in the concept of sovereignty. Indian tribes may also exercise powers delegated to them from the Federal Government and from the states. As sovereign entities, tribes are distinct from both the Federal Government and the states. Within the boundaries of Indian reservations, tribal governments are increasingly functioning as the primary governmental authority, as the roles of Federal agencies have become more secondary in nature. The Bureau of Indian Affairs (BIA) and Indian Health Service (IHS), which formerly had a dominating presence in Indian communities, have become little more than funding sources on many reservations, as tribal governments have contracted to perform their functions pursuant to the Indian Self-Determination and Education Assistance Act of 1975.6 State governments have only limited governmental authority within Indian reservations, especially with regard to Indian people and Indian lands.

In keeping with the principles of tribal sovereignty, if the tribes are to become real partners in our national historic preservation program, as the NHPA declares to be the Federal policy, tribes need to have the option to decide for themselves whether or not they want to perform the lead role in the administration of the Federal historic preservation program on lands within their territorial jurisdiction. As a practical matter, this means having appropriately qualified tribal staff to identify properties within tribal jurisdiction that appear to be eligible for listing on the National Register of Historic Places, to plan and implement appropriate measures to preserve such properties, and to participate in the consultation process established pursuant to § 106 of the NHPA (and 36 CFR Part 800) for protecting such properties from damage or destruction as a result of actions taken, or assistance provided, by Federal agencies. The fact that the SHPOs have been given such a major role in the § 106 consultation process has contributed to friction between tribes and SHPOs, and the proper way to alleviate such friction, the only way that is consistent with tribal sovereignty, is to offer tribes the option of performing the role of the SHPO within Indian reservations.

We must note, however, that it is not enough to provide this option for tribes, even if the level of appropriations is increased such that the option is truly available to those tribes that want to exercise it. Tribal programs that are operated parallel to state programs will not be enough to serve the broader national interest in historic preservation unless there is genuine coordination and cooperation among tribal and state programs. Tribes in the contiguous 48 states of the United States today have governmental jurisdiction over only 3% of the land, yet they maintain interests in, and indeed are vitally affected by, lands and other natural resources outside of their reservation boundaries. Tribes have both historic and contemporary interests in knowing about, protecting, interpreting, and having access to properties that are outside their reservations. The SHPOs can perform a key role in preserving such properties and assuring tribal access to them. Similarly, tribes could provide for the protection of historic properties within their reservations that, although not of great significance in tribal history, may be significant in state or regional history.

Tribes can play an important role in helping to expand the focus of our national historic preservation program by recognizing the significance of historic properties which do not include historic buildings. A substantial measure of success in preserving the historically significant built environment has been achieved during the first quarter century since the enactment of the National Historic Preservation Act of 1966, but we have had less success in preserving historically significant places and have barely begun to address the challenge of recognizing the historical significance of nonmaterial culture. As tribal governments become integrally involved in our national historic preservation program,

these challenges can be expected to receive more attention, because tribal governments will not let them be neglected.

The virtual exclusion of Indian tribes from the Nation's historic preservation program has been a loss not just to Indian and Alaska Native peoples, but to all Americans. All of the land which is currently within the United States is the aboriginal territory of American Indian and Alaska Native peoples. For Native peoples, the failure to preserve culturally significant properties and make them accessible for Native use results in the weakening of tribal cultural traditions and threatens the ability of Native peoples to preserve their self-defined identities. The general public's relative lack of knowledge about Indian history and contemporary Indian societies is an intangible loss which contributes to misunderstandings between Indian peoples and their non-Indian neighbors. All Americans would benefit from a national historic preservation program in which tribal and state programs work together.

### **Grants to Tribes**

The statutory language that authorizes grants to tribes states that such grants may be made "for the preservation of their cultural heritage." Cultural heritage is a very broad concept, and, accordingly, this language appears to authorize a broad range of activities within the tribal grants program. The NPS has adopted such a broad interpretation in its guidance to tribes. We commend the NPS for taking this approach, and we urge that the NPS resist any temptation to overregulate the tribal grants program.

Some tribes with relatively large reservations and well-established governmental institutions could make the emphasis of a historic preservation grant the development and implementation of a tribal law for the protection of historic properties, with the intention of replacing the SHPO within reservation boundaries. For other tribes, the Section 106 process may be of less concern, but they may still be quite interested in preserving historic properties. Still other tribes may be more interested in preserving their non-material culture, especially their language and oral tradition.

A review of the 280 tribal grant applications for the \$500,000 in available FY90 monies shows that tribal historic preservation differs significantly from the general perception of what constitutes historic preservation. Of the projects proposed for funding under the FY90 tribal historic preservation grants there were ~37 proposals for development of tribal historic preservation plans, ordinances and/or offices. There were ~39 education-related proposals including oral history, language preservation, tribal-specific curricula and archives and museum-development. Thirty-one applications requested funding for training tribal members in preservation and archaeological skills designed to lessen the reliance on non-Indian outsiders and 64 proposals requested funding for identification of on- and off-reservation sites of religious and historical significance. Included among these 64 applications were requests for assistance to establish databases on sites and areas which could, in turn, be used in tribal, Federal and state land managing and planning activities.

### **Appropriations for Tribal Programs**

There are more than 500 federally recognized Indian tribes in the United States, including Alaska Native villages. While we wish for a level of appropriations that would be sufficient so that every tribe could receive funding for a tribal historic preservation program, we do not realistically expect Congress to provide this amount of money, at least not in the second year of the program. We cannot state too strongly that the preservation of its cultural heritage is a matter of vital importance for virtually every Indian tribe in the United States. More than 65 tribes sent representatives to the two consultation meetings which the NPS held in January 1990 and many others have communicated via telephone and/or letter. Tribes have been struggling to preserve their cultures against formidable odds

for generations. Indeed, it is largely because of their perseverance that the number of tribes in existence today is as high as it is.

However, if tribes are to become real partners in our national historic preservation program, they need to be able to hire staff to interact with state and Federal agencies and to perform at least some of the functions within their reservations that the SHPOs perform in their states. If our Nation as a whole is to realize the benefits that could flow from the partnership of tribes in the historic preservation program, the appropriations for tribal program grants must be more than a token level and must be provided on a recurrent basis. The authors recommend that in both FY91 and FY92, the level of appropriations for tribal programs be at least \$5 million, and that this level be gradually increased in subsequent years. Furthermore, we recommend that the appropriations for tribal programs not be simply deducted from funds that would otherwise have been appropriated for state programs. Our national historic preservation program needs to build cooperative working relationships between tribes and states, and to make it appear that tribal programs are in competition with state programs for the same funds would be counterproductive.

### Conclusion

The National Historic Preservation Act of 1966 is the basic Federal legislation pursuant to which our national historic preservation program has been fashioned. The 25th anniversary of the NHPA will be observed in 1991. The accomplishments of the first quarter century will be celebrated, and some of the challenges of the next quarter century will be discussed. It is our hope that, during the next quarter century of the NHPA, the dominant American society will come to terms with the "problem" of the American Indian in American history.

We recognize that this is a lot to hope for and that it will likely take longer than a quarter century. We believe, however, that the American society must try to achieve such a reconciliation, and we know that a necessary step toward such a reconciliation is to establish a prominent role for tribal governments in our national historic preservation program.

1See generally The American Indian and the Problem of History (C. Martin, ed., Oxford University Press, 1987).

216 U.S.C. § 470-1.

316 U.S.C. § 470a(d)(3)(B).

4 Secretary of Interior's 20th Anniversary Report on the National Historic Preservation Act 34-35 (1986).

5 See generally F. Cohen, Handbook of Federal Indian Law 229-57 (1982 ed.) 6 Pub. L. 93-638, codified as amended at 25 U.S.C. §§ 450-450n.

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# The Cost/Benefit of Making an ARPA Case Tom Des Jean

Looting archeological sites for relics on the Cumberland Plateau has been a common practice for at least 70 years. Big South Fork National River and Recreation Area (BISO) is especially targeted by relic hunters because of its estimated 4,000 visible prehistoric rockshelter sites and its 103,000 acres of rugged terrain which is difficult to patrol. The Visitor Protection Division at BISO was aware of on-going looting problems within the area, and electronic surveillance equipment (ESE) had been installed at an archeological site known to be frequently looted (an archeological sites monitoring program developed between 1987 and 1989 provides information on actively looted sites). On December 23, 1988 rangers discovered three adults and a juvenile illegally digging at the prehistoric site. They were taken into custody and charged with a felony violation of the Archeological Resources Protection Act. While this may sound like a pretty straightforward "bust," there was a lot of work and expense involved.

The costs incurred by the area to make this "bust" were high and so was the cost of prosecution. The relatively light sentence meted out appeared, initially, to be too unbalanced to justify such an expense out of a limited enforcement budget.

Prosecution costs incurred by BISO included rangers salaries and support. They also included an initial impact assessment by an NPS archeologist who had to be flown in, and a subsequent, independent assessment by a non Federal, "objective" consultant.

The total cost to the National Park Service to make this case was approximately \$9,184.18. The result of adjudication was that the three defendants pleaded guilty to a misdemeanor. The juvenile, as is customary, was not charged. For this conviction the defendants were all fined \$474.00, and were given two years probation and two years banishment from the area. If left at this point the NPS got a 6.5:1 ratio of dollars spent to actual fines. The total cost to the Federal Government, including court costs, prosecutor, and defense attorneys, would push this ratio much higher; probably on the order of 10:1.

Other results that came out of this case were more rewarding and did more for protecting the finite cultural resources at the Big South Fork than any other methods. The December 23 ARPA incident was nationally publicized and became a featured news item in many small local newspapers and in national newspaper chains in Louisville, KY, and in Nashville, TN. The case was still being referenced in major newspapers a year after the incident. It was also reported at the time by two television news programs in Knoxville, TN. While much of the value for this case cannot be demonstrated in monetary amounts, some idea of dollar values can be estimated by comparing the media coverage expended in reporting this incident with the cost of advertising space of similar size and time duration.

These rates indicate that the peripheral or spin-off values of ARPA cases tend to evenup the cost/benefit ratio.

When enforcement expenses (\$9,184.18) are compared to the publicity value (\$9,078.90) a more evenly balanced cost-benefit ratio (1:1) occurs. However, merely quantifying the value of media coverage (expressed as advertisement costs) misses the real impact of such publicity on the public at large.

Consider that the average lecture given by the Interpretation Division to schools and civic organizations contacts about 30 individuals at a cost of approximately 54 cents per person. If the NPS were to contact the same number of individuals that the ARPA media coverage contacted (about 513,000) then we would have had a much larger expenditure.

While the second and third ARPA busts in an area will not generate the same degree of media attention that the first one will, the value of publicity (measured in terms of estimated numbers of persons contacted) illustrates how making an ARPA case can raise public consciousness and justify the expense that cultural resource law enforcement requires.

Tom Des Jean is an archeologist at the Big South Fork National River and Recreation Area, Oneida, TN.

# Preservation Technology Update The Great Reconstruction Debate: the Moment in Time

Dear Editor,

I was intrigued to see the articles on reconstruction in *CRM Bulletin*, *Vol.* 13, No. 1, because the very same issues are causing debate in Britain. The conflicts arise in the same way: the interpretive motive eroding the very information it seeks to display.

My own government commission, English Heritage, operates on the general principle that monuments should be "conserved as found," i.e., maintained in the state they were when they came into governmental care. In practice, this has to be qualified because monuments require active conservation through repairs and management.

Because I work with landscapes, which cannot be conserved as found because their materials grow and die, I need a version of this principle that recognizes the dynamic equilibrium between natural decay and repair. I work on the axiom... that repairs should seek to return a site to its state following its last significant change. The debate then becomes one of deciding whether late changes are significant.

The basis of any such philosophy is that certain monuments should be removed from the stream of evolution, as this is the best way to avoid any further significant loss of archeological information. This is valid, I feel, for monuments which are taken into care for the purpose of retaining that information. What is not acceptable at such sites is reconstruction to an early "high point," as William J. Hunt phrases it. This necessarily involves loss of archeological information but gives the false impression of when the evolution of that monument ceased.

The concept of restoring gardens to the high point of their development is understandable, because that is when they were of most historical interest. The gardens of Williamsburg and the early restorations by the Garden Club of Virginia were, despite occasional archeology, substantially the inventions of the landscape architects involved. One British example, by an Office of Works inspector who had worked in the USA, followed. This was Kirby Hall, in Northamptonshire, where current archeology reveals not only the inaccuracy of the reconstruction but also how much archeological information must have been lost during it. The 1970s parterre at Kenilworth Castle, in Warwickshire, is merely there to give the right atmosphere to set off the Tudor buildings nearby. The reconstruction at Het Loo, in the Netherlands, looks well, but the possibility of checking its accuracy has probably been lost because the clearance of the overburden was accomplished crudely by bulldozer.

For such reason, reconstruction is no longer the first refuge for the garden conservator. It might be of interest if I ran through some of the recent cases on both sides of the Atlantic where difficult problems with multi-layered landscapes were solved by the "last significant date" guide:

**Hampton Court, Greater London, UK.** The gardens here are of two main phases, Henry VIII and William and Mary. Despite the temptation to suggest reconstruction of some Tudor gardens to match the Tudor palace, a study completed in 1982 recommended that restoration should be to the William and Mary period on the basis that the whole gardens would regain their unity of expression, and that nothing of the remaining Tudor fabric would be lost by this approach.

**Stowe House, Buckinghamshire, UK.** This famous garden evolved continuously from the end of the 17th century until about 1800. Just after that date the gardens were well recorded by a series of watercolors by an artist called Nattes. Instead of returning the gardens to some heyday, perhaps in the 1730s when the Charles Bridgeman gardens were made, the committee under George Clarke decided in the mid 1980s that restoration should be to the late 1790s.

**The Fens, Boston, MA.** The Fens were originally designed by the Olmsted office. In the 1920s there was a redesign by Arthur Shurtleff, later to become a prominent Boston landscape architect. Finally, the "Victory" gardens were made during the Second World War and a war memorial was built. For a while, the consultants struggled with the implications of returning the Fens to the Olmstedian form, but this would have involved a great deal of reconstruction. Then they accepted that the park had evolved.

**Gettysburg, PA.** This 1860s battleground was changed within months by a large cemetery for those slain. Then the battleground was made a visitor site, and roads were laid out and wardens houses built. The last significant changes were in the period 1895-1905. After much heart-searching, the NPS has accepted that returning the battleground to the day of the battle would be so destructive that it is not a viable option. Instead, the aim is the 1895-1905 date.

Bellevue House Kingston, Ontario. Sir John A. Macdonald, Canada's first prime minister, rented the house in 1848 for a year at an important stage of his career, and this is why it was acquired by Parks Canada. The garden that survived was predominately that made by later occupants of the 1860s and no evidence as to what it was like before is available. Although the house was furnished to interpret Macdonald's occupancy, directives to do the same for the garden were resisted by the site superintendent and others. John Stewart reports that "It was felt that although the site commemorated Sir John A. Macdonald, the real worth of the garden is as a document of a Victorian garden, established by a well-to-do family of the 1860s which had evolved and which was worthy of preservation.... The approach taken was to repair as well as possible those elements which had been damaged or lost and to restore only those features which could be documented." **Knole**, **Kent**, UK. The Wilderness at Knole was walled in Tudor times, and improved in several phases. It was engraved by Johannes Kip about 1705, altered again in 1711, and re-engraved by Thomas Badeslade in 1719. There was more planting in the 1730s, and a good deal more in the 1760s. The first good mapping dates from the 1860s. It is likely that what was then shown had not changed significantly since the 1760s and no major changes have occurred since. No major changes, that is, except for the storm of 16 October 1987 which devastated the area. Comparison of mapping and field archeology reveals the locations of most of the 1860s paths, but only a few of those shown on the Badeslade. The consultant wants to restore to Badeslade, but English Heritage refuses to agree to the plan on the ground that a speculative reconstruction conveys little valid historical information and may even destroy some. I hope that these few examples show that speculative reconstruction of landscapes appears to be on the way out on both sides of the Atlantic. Instead, repairs to the last date of significant change conserve all historical information and tell a more honest, if more complex, tale.

Yours sincerely,

David Jacques Inspector of Historic Parks and Gardens, English Heritage

The following response was prepared by Lauren Meier, ASLA, Historical Landscape Architect, Preservation Assistance Division, National Park Service. David Jacques has raised thoughtful issues regarding the future of our significant historic landscapes: How does one choose an appropriate preservation treatment? The Department of the Interior has developed definitions and standards for seven basic treatments: acquisition, protection, stabilization, preservation, rehabilitation, restoration, and reconstruction. Choosing an appropriate preservation treatment may be based on a variety of factors, including the existing condition of the property, present and future threats, economics, existing or

proposed uses, or how the property is to be interpreted. Regardless, for those historic properties that are significant, we should strive to protect surviving historic fabric and to provide interpretation in a clear and honest way. The Secretary of the Interior's Standards for Rehabilitation state: Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

Both restoration and reconstruction, however, may require removal of later layers in order to produce an image of an earlier period. Decisions to restore or reconstruct a historic property should be based on two premises: 1) when the interpretive objective for the property outweighs the issues related to destruction of later layers; and 2) when substantial and adequate documentation exists to eliminate the chance of speculative construction.

National Register criteria state that ordinarily reconstructions are not eligible for the National Register. Reconstructions, however, do qualify "if they are integral parts of historic districts that do meet criteria, or... are a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived."

Regarding the examples presented by Mr. Jacques, it may also be interesting to note that two other events contributed significantly to the historic context of the Fens. In 1910, the Charles River was dammed which altered the ecology of the water system, from an estuary to a fresh water course. In 1907, construction of the Museum of Fine Arts was begun adjacent to the parkway. Thus, Arthur Shurtleff had to deal with major changes in the history of the city which have consequently acquired significance in their own right. Today, the City of Boston practices ongoing "rehabilitation" of the historic landscape, which preserves the historic character of the system, and allows for modest new construction to accommodate future use.

In the case of Gettysburg, the site is interpreted and managed as a commemorative battlefield in recognition of the importance of the later additions. From the perspective of the Secretary of the Interior's Standards, this is an appropriate treatment.

In conclusion, we concur with the position that we as preservationists must be sensitive to the many layers of history associated with our cultural resources. We hope that existing and new guidance materials produced by the National Park Service will continue to help historic property managers in the U.S. make informed and appropriate decisions regarding the treatment of our Nation's historic landscapes.

## Notes on Historic Flooring An 18th Century Method for Making High Quality Wooden Flooring from Boards of Irregular Thickness

Lee H. Nelson

The subject of flooring is a very complex one, that involves a number of regional variations, differences of taste and economic level, craft practices, materials, and variations within a given building, depending on the importance of the room.

This training aid focuses on only one aspect of assuring that a high-quality wooden floor would be smooth and would require no hand planing or sanding after the floor was laid—all this at a time when there was no quality control method for the sawing of boards to a **uniform thickness**, whether by pit sawing or mill sawing.

Before the age of modern machinery, logs were either pit sawn into boards using hand labor, or were mill sawn; but, as with other building materials, such as handmade bricks, considerable variation occurred in producing boards of a specific thickness. For example, if the desired board thickness was 1" thick, boards that ranged from 1" to 1 3/8" would be acceptable as meeting the intended size. This variation in the thickness of individual boards presented a problem-solving challenge to the craftsmen to fashion such boards into a smooth and flush floor.

After pit sawing or mill sawing the log into boards, the following steps were required to produce a high quality flooring job:

- 1. Hand plane the top surface of the boards to produce a smooth surface.
- 2. Hand plane both edges of the boards with a very slight bevel to assure tight joints at the top edges of the boards.
- 3. Using a rabbet plane, hand plane rabbets on each lower edge of the boards—using a hand made gage or caliper to establish a constant dimension or reference line —as to the desired uniform thickness. The rabbet is the **quality control aspect** of this process to assure a flush floor.
- 4. Hack out (using a tool like an adze) the under surface of the floor boards down to the rabbet lines, so that there is a constant floorboard thickness at **each joist intersection**, thus assuring a flush surface (see accompanying sketches).
- 5. Lay the floor boards on joists and hammer "blind" nails through the edges of the floor boards into the joists. Even if the floor boards were **face** nailed (exposed nail heads), the above steps were usually followed.

Note: Floor board examples that demonstrate some of the information in this article exist in the Independence National Historical Park Architectural Study Collection. This article does not attempt to address those types of flooring that used tongues and grooves, splines, or joints at the ends of floor boards. For illustrations of early tools such as pit saws, adzes, rabbet planes, etc., see *A Museum of Early American Tools* by Eric Sloane, 1964, New York.

#### **Recommended Reading**

See *The Rules of Work of the Carpenters' Company of the City and County of Philadelphia, 1786*, annotated by Charles E. Peterson, FAIA, Princeton, 1971, [pages 10-11], which suggests floors of four distinct levels of quality, each with several levels of refinement, the finest of which consisted of "1 1/4 inch stuff, boards from 3 to 6 inches broad, square edge and straight joint... [and add cost] if such boards are grooved... [and add more] if such floors are nailed in the edge, the heading joints tongued... [and add one fourth more] if such floors are dowel'd..."

Lee H. Nelson, FAIA, was a historical architect with the National Park Service for 32 years. He retired as chief, Preservation Assistance Division, in February 1990. Emogene A. Bevitt and Marilou Reilly, Preservation Assistance Division, assisted in the development of this article.

#### \_ ARCHEOLOGICAL ASSISTANCE PROGRAM

#### INFORMATION REPORT

## The Many Publics for Archeological Public Education Francis P. McManamon

This article first appeared in the Federal Archeology REPORT; June 1990.

More and more individuals and organizations recognize the need for a national, high-profile effort to promote archeology throughout the country. Leaders in American archeology perceive that better public understanding about archeology will lead to more preservation of sites and data, less site looting and vandalism, greater support for the curation of archeological collections and records, and a demand by the general public for more interpretation of and participation in archeology.

Many government agencies—Federal, state, tribal, county, and municipal—already have embraced public education efforts and begun to promote them. The Archeological Assistance Division (AAD) has created a database of summary information about public education efforts in archeological projects. This clearinghouse—the Listing of Education in Archeology Projects (LEAP) —has about 1,200 entries.

As public education becomes a more common concern, we want it also to be as effective and efficient as possible. This means that we must come to know our audience better, to sharpen the focus of our messages, and to use appropriate media. We can distinguish several "publics" among the audience for public education. Each requires a different message and means to reach them. They are not mutually exclusive, nor are they of the same size, but each is important and merits attention.

#### The General Public

We do not have detailed survey data that can be used to divide the general public in terms of varied interests in archeology. Probably well below 5% of the public may be truly "archeologically literate," such as some avocational archeologists and deeply interested, well-read lay persons. Some 25% to 30% may be interested enough to read magazine articles on the topic, visit archeological parks or excavations, or perhaps even take part in an excavation as volunteers. The balance of the general public probably gets its archeology, to the extent that it gets any, from Indiana Jones or the nightly news.

We ought to expand our efforts toward reaching the more interested and informed people, especially in the area of **participatory** experiences such as volunteer activities, open houses, and tours. Additionally, there are important subgroups within these categories who appreciate archeology, actively support archeological projects, and even volunteer time and services in a variety of ways that assist archeological activities. Boy Scouts, Girl Scouts, community public service organizations, natural resource conservation organizations (e.g., the Audubon Society, the Sierra Club, and the Nature Conservancy), and retired persons organizations can be mobilized for archeology.

Mass media education projects and programs are needed. Efforts to reach the majority of the general public should be **positive**, **short**, **and sweet**. Most of the public seems to be inherently supportive of archeological preservation when it is not presented as a hobby for rich and famous dilettantes, grave robbing, or a wildly expensive and misguided government boondoggle.

#### **Students and Teachers**

Students and teachers are a "public" that deserves special attention because they present special opportunities. If teachers can instill in their students an appreciation of archeology and archeological resources, efforts to provide those teachers with background knowledge will be exponentially fruitful.

But how do we reach teachers efficiently? There is intense competition for teachers' attention and interest. Geographers, backed by the substantial resources of the National Geographic Society, and historians currently have major initiatives for improving the teaching of their disciplines in secondary and elementary schools. Science education also is a topic of recent concern and attention. This makes it unlikely that courses devoted exclusively to archeology will become common in elementary or even secondary schools. However, because of the wide range of disciplines to which archeology is related, there are opportunities for using archeological examples, lessons, techniques, and concepts in a variety of courses at all educational levels.

#### **Congress and the Executive Branch**

A third public consists of members of Congress, their staffs, and staffs of Congressional committees, and political appointees in the Executive Branch of the Government. One basic message for this group concerns the great value of archeological resources to all Americans and the importance of the preservation of this record for future generations.

Another message is about archeological activities. When Congress asks questions about these activities it behooves agencies to respond as comprehensively as possible and offer a national perspective on the problem or topic being considered. Until recently, most such questions required hurriedly collected data and resulted in little or no analysis.

Since 1986, thanks to efforts by Federal agency archeologists in the field and headquarters offices, the AAD of the NPS has been able to compile governmentwide statistics for the Secretary of the Interior's Annual Report to Congress on Federal Archeology.

One recent example of the effective use of such information by Congress and the Executive Branch is the 1988 amendments to the Archaeological Resources Protection Act (ARPA). Efforts to formulate and enact these amendments included two congressional studies and one General Accounting Office probe. Anecdotal accounts of the looting problem abound in the reports of each of these studies, but it was the quantitative summaries of the extent of known looting and the small number of reported prosecutions under ARPA that served to coalesce opinion about the need for the amendments.

#### **Native Americans**

It is ironic that the segment of the public directly connected to the past societies that most American archeologists study has not been a primary audience for archeological public education. Although there are some notable and promising exceptions, lack of attention and concern about Native American public education has been the rule.

Those concerned with the preservation of archeological collections linked to modern Native American groups may pay a severe price for this past inattention. Increasingly, Indian groups and tribes are insisting on the repatriation of all or parts of such collections. Archeologists must move swiftly to recognize their legitimate concerns and to try to provide more information about their pasts to them.

Native Americans increasingly seek training and technical information and themselves serve as instructors in coursework on protection and preservation of archeological and ethnographic resources. NPS courses in curation, interpretation, archeological protection, and ethnography programs have benefited from Native Americans' participation as teachers and students. Concern about the contents and care of objects in archeological collections

has fostered an interest by Native Americans in museum methods and techniques as well as sources for training in museology.

#### Attorneys, Managers, and Archeologists

Government attorneys, land and program managers, archeologists and other cultural resource specialists may not view themselves as an audience or a distinct public; however, there are many ways in which archeological preservation could be improved through effective training for this "public."

US attorneys and their staffs and Federal, state, tribal, and local land managers need basic information about archeological looting and how they can help fight it through their activities and programs. For those who will be involved directly in case investigations and prosecutions, the Federal Law Enforcement Training Center provides a 40-hour course. This is designed for field law enforcement, cultural resources personnel, and prosecutors. For others who oversee or fund activities, NPS has developed a course on archeological protection that provides background information and guidance for effective program management.

The Archeological Assistance Program nationally offers week-long professional archeological seminars on archeological field conservation and site stabilization, and regionally on related topics. There are plans for this training to be expanded. It may include archeological sampling, archeological analysis methods, the appropriate use of archeological predictive models, and other contemporary topics.

#### Conclusion

Archeologists in academic institutions must rely on the general public's interest in archeology to fill their course offerings so their departments remain strong and grow. Archeologists involved with the public rely on lay people to support Federal, state, tribal, and local archeological resource preservation activities and programs. All archeologists depend on individual members of the public to protect archeological resources that they find on their land, in their jobs, on their vacations, or in other situations.

Dr. Francis P. McManamon is chief of the Archeological Assistance Division, National Park Service, WASO.

## ARCHEOLOGICAL ASSISTANCE PROGRAM INFORMATION REPORT

### A National Strategy for Federal Archeology

#### Francis P. McManamon

This is the second of a series of articles that present actions to improve Federal Archeology. A proposal for the development of a national strategy was discussed in Volume 13, No. 2 of the CRM Bulletin.

On March 20, Secretary of the Interior Manuel Lujan, Jr., announced a national strategy for the preservation of archeological sites and a new policy governing treatment of sacred objects and human remains on Federal lands. In a memorandum to heads of bureaus and heads of offices within the Department of the Interior, Secretary Lujan identified four areas of special emphasis: (1) public education and participation; (2) cooperation in fighting archeological looters; (3) more interagency information exchange; and (4) increased site inventories and collections curation.

Secretary Lujan stated, "America's archeological heritage, the sites from her historical and prehistoric past, needs more protection. Like rare and endangered species, some kinds of archeological sites are threatened with extinction. Public education is extremely important because it is very effective in building a sense of stewardship toward America's archeological heritage.

"I am hereby directing each of you to emphasize these (national strategy) activities in your bureau archeology and cultural resources programs and in related programs, such as interpretation, law enforcement, and public affairs. This emphasis may involve developing new activities as well as assigning higher priority to activities already being undertaken at a more modest level. The results of these new emphases should be apparent in the information that each bureau submits for the Secretary's report to Congress on Federal archeology at the beginning of the next fiscal year." He said that he plans to send letters to other Cabinet-level officials urging the adoption of this strategy in their departments and agencies.

Secretary Lujan drew upon his recent report to Congress on Federal archeological activities (*Federal Archeology: The Current Program, 1989\**) in developing this national strategy. He also was aided by comments from archeologists and historic preservation officials throughout the Government who joined in a discussion of this issue during a meeting of historic preservation officials in Denver last December.

\*Available through GPO, SIN 024-005-010-572, \$10.00 per copy.

## Computer News

#### Automation in the States

Betsy Chittenden

The Interagency Resources Division (WASO) recently completed two studies of automation efforts in state offices. The results of the studies are being compiled and will be published in late summer. The preliminary results give a fascinating glimpse of a portion of the cultural resources community that has a strong investment in automation.

One study, done under contract by Lisa Warnecke, gathered broad information about the current use of Geographic Information Systems (GIS) in state government for all types of state functions, not just cultural resources. This study showed interest and some progress in acquiring and using GIS in all states, although use of GIS for cultural resources is clearly in its infancy. Many states have formal GIS groups or offices to coordinate development of a technology that is used in mapping, natural resources, and cultural resources, transportation, and numerous other areas of state government.

The other study was a detailed survey of automation in all State Historic Preservation Offices. The information gathered is permanently stored in a small database called AIPS, the Automated Information Programs System. It is hoped that the AIPS data can be updated annually, and expanded in future years to include Federal agencies and other cultural resources organizations.

The results of the AIPS survey showed extensive use of computers for cultural resources management in state preservation offices, and environments and experiences remarkably similar to that in the NPS. All SHPO offices currently use computers in some capacity. Like the NPS, the SHPOs are heavy users of MS/DOS microcomputers, dBase software, and WordPerfect. A number use micros in combination with larger minis or mainframes. About two thirds use microcomputers (80% of which are MS/DOS), about one fifth use minicomputers; about one fourth use mainframes. A common combination is the use of a state or university operated mainframe for a database of archeological sites, and microcomputers for other cultural resources databases. The most popular database management software is dBASE III Plus, which is used for at least one system by nearly half of the SHPOs. Other popular software used includes Informix, RBASE, and dBASE IV. More than half of the SHPOs use WordPerfect 5.0 for word-processing; no other word processing software is used by more than one in eight SHPOs.

Automation of cultural resource inventory data is well underway in the states. About three quarters have archeological site data automated, about two thirds have automated Section 106 data, two thirds have automated National Register properties data, two thirds have automated historic structures data, half have automated data on historic districts, and nearly half have automated data on preservation tax incentives projects. Information on cultural resources that SHPOs are generally not interested in automating include photographs, maps, development and acquisition grants, certified local governments, and preservation volunteers. Overall, there are more than 270 individual databases under development or operational in State Historic Preservation Offices.

There is a wide variety of interest in computerized mapping and drafting technologies. While 10% of SHPOs have computer assisted design (CAD) systems under development or operational, nearly two thirds are not interested in acquiring CAD systems. About one quarter of the SHPOs have GIS systems already under development or operational, yet about a third are not interested in GIS.

While automation is clearly increasing in importance in SHPO offices, it is still generally managed by cultural resources professional staff and administrators who may or may not have specific training in information management. Most database administrators are cultural resource professionals (often archeologists) with some computer skills or on-

the-job training, rather than computer specialists who have received training in cultural resources. Nor is information management a primary responsibility for those whose job it is: nearly two thirds of the database managers do this task as a secondary job function.

Problems? Comments revealed that at least one in five SHPOs have funding problems that affect their ability to purchase and develop systems and to do data entry. Many SHPOs also indicated that they do not have control over the hardware and software they use. A common complaint heard about state- or university-owned mainframes is that the SHPO offices generally have less control over, or access to, their data. Dissatisfaction with this situation is shown by the number of SHPOs that are "voting with their feet": four states indicated that they had recently converted, or are in the process of converting, from mainframe to microcomputer systems.

Despite the problems, and a chronic lack of communication among cultural resources organizations on automation issues, the SHPOs have developed remarkably similar information management systems. The published results of the survey will include details on SHPO databases, their automated data, their hardware and software, and contact names and phone numbers. We hope that making this type of information available to the cultural resources community will engender more cooperation and information exchange among the entire community.

### Dogwatch Restoring *Grace Bailey*

James P. Delgado

"Dogwatch" is the term traditionally used for the two-hour watch during which half the ship's crew eats supper and swaps stones;

The 1882, Long Island-built two-masted schooner *Grace Bailey* had a long life in various maritime trades. Renamed *Mattie* in 1906, the schooner was rescued from oblivion by Capt. Frank Swift in the early 1930s. Capt. Swift's dream was to take old schooners, then being laid up in the passing of the days of sail and the onset of the Great Depression, and operate them as a "dude" fleet, bringing the sea and the rugged Maine coast to passengers who would pay for the privilege of a recreational passage by sail along the islands and inlets of New England shores. Through the years, a number of historic schooners were employed in this new form of maritime trade and recreation, which now, more than 50 years later, in itself is historic. There are presently several old vessels working in the Maine Windjammer fleets of Rockland and Camden—*Isaac H. Evans*, *Stephen Taber, Lewis R. French, J.E. Riggin, Mercantile*, and *American Eagle*—as well as modern vessels built in the traditional style, such as *Heritage*. Two of these vessels date to the beginning of the concept and Frank Swift's original dream—*Mercantile* and *Mattie*.

Tired and worn after long careers, *Mercantile* and *Mattie* were sold in 1986 to Capt. Ray Williamson of Camden, Maine. Williamson and a few investors have since completely restored *Mercantile* and are now undertaking the restoration of *Mattie*. The work, being done under cover in a shipyard shed, is being accomplished in the traditional style, and well illustrates the basic premise of the recently completed *Secretary of the Interior's Standards for Historic Vessel Preservation Projects*—common-sense, waterfront-tested standards and guidelines that reflect a hands-on approach to the restoration and preservation of historic ships in the corrosive, harsh marine environment.

Nearly 80% of *Mattie* has been replaced. Such a high percentage of replacement is not incongruous in maritime preservation—only 15% to 20% of *USS Constitution*, "Old Ironsides," remains in the ship that dates to her 1797 construction. Apart from wear and tear on the remaining timbers and planks, the new construction in *Mattie is* identical to her 1882 builder's work. Williamson and his crew dug hackmatack roots out of swamps to fashion the schooner's knees, and working by hand with a few modern aids—electric saws, sanders, and drills—they are rebuilding the schooner with wooden treenails and iron spikes, using the same type of timber originally employed. This in-kind approach to the schooner's rebuilding has preserved the lines, materials, and workmanship, and hence captures the feeling and association of the vessel's historic period of significance.

In a final fitting gesture, when launched this spring, the schooner once again bore her original name, *Grace Bailey*, as she reentered a historic trade. Preserving one form of maritime skill through her restoration, *Grace Bailey* also keeps the traditions of the sea, and the historic windjammer fleet's tradition alive as she sails the Maine coast.